

# Engagement in Head Start Services Among Diverse Immigrant Families

Author: Anne Elizabeth Day Leong

Persistent link: <http://hdl.handle.net/2345/bc-ir:107445>

This work is posted on [eScholarship@BC](#),  
Boston College University Libraries.

---

Boston College Electronic Thesis or Dissertation, 2017

Copyright is held by the author, with all rights reserved, unless otherwise noted.

BOSTON COLLEGE  
School of Social Work

ENGAGEMENT IN HEAD START SERVICES AMONG  
DIVERSE IMMIGRANT FAMILIES

A dissertation by  
ANNE DAY LEONG

Submitted in partial fulfillment  
of the requirements for a degree of  
Doctor of Philosophy

MAY 2017

© Copyright by ANNE DAY LEONG, 2017

# **Engagement in Head Start Services Among Diverse Immigrant Families**

**Anne Day Leong**  
**Boston College School of Social Work**

## **Abstract**

In industrial organizational psychology, there is an established link between worker job satisfaction and worker engagement in their job. Similarly, research has found an association between a parent's satisfaction with their child's education services and a parent's level of involvement in their child's education. Levels of family involvement in their child's education as early as preschool have been correlated with positive academic and behavioral outcomes throughout childhood. This line of research posits that families who are satisfied with their child's education services are more likely to be involved in their child's education and, consequentially, their children are more likely to have positive outcomes.

According to the theories proposed by industrial organization psychology and education research, this dissertation explores the potential links between satisfaction and involvement in Head Start services among U.S. born and immigrant families. To begin to understand the potential connection between satisfaction with services, engagement in services and the unique experiences of the immigrant communities in Head Start, this collection of three studies seeks to employ a mix of primary quantitative data collected in 2013-2014 and secondary quantitative data from the Head Start FACES 2009 dataset to examine satisfaction with and involvement in services among U.S. born and immigrant families in Head Start. Primary data collection primarily relied on demographic information, the Parent Satisfaction in Early Education Scale, and the Family Involvement Questionnaire. All measures were designed for Head Start and validated for use in immigrant communities.

Findings suggest immigrant families do not differ in levels of satisfaction or engagement in their child's Head Start program. Findings indicate satisfaction in services is a stronger predictor of engagement in services than any demographic variable related to immigration. Furthermore, findings point toward a mediating relationship between maternal education, employment, and involvement but do not show the same mediation for fathers.

## DEDICATION

This dissertation is dedicated to:

Wei and Emily Leong for their love, support, inspiration, and dedication.

and

In memory of Staci Perlman, a mentor and friend that changed the  
direction of my life in her own compassionate way.

## TABLE OF CONTENTS

CHAPTER I: DISSERTATION INTRODUCTION.....	1
Objectives .....	2
Background.....	3
Significance.....	5
Theory.....	6
Conceptual Framework.....	7
Three paper format.....	9
Conclusion.....	12
Chapter I References.....	14
 CHAPTER II: MEASURING SATISFACTION IN HEAD START SERVICES IN IMMIGRANT AND U.S. BORN FAMILIES.....	18
Methodology.....	28
Procedures.....	28
Sample.....	29
Measures .....	31
Statistical Analyses .....	32
Results.....	33
Discussion .....	39
Limitations and Future Directions .....	42
Chapter II References .....	44
 CHAPTER III: PREDICTORS OF INVOLVEMENT IN HEAD START SERVICES AMONG DIVERSE IMMIGRANT FAMILIES.....	50
Methodology.....	58
Procedures.....	58
Participants.....	60
Measurement .....	60
Sample.....	62
Statistical Analyses .....	64
Results.....	64
Discussion .....	68
Limitations and Future Directions .....	70
Implications.....	71
Chapter III References .....	72
 CHAPTER IV: IMMIGRANT PARENT INVOLVEMENT IN HEAD START SERVICES: AN EXAMINATION OF FACES DATA.....	76
Methodology.....	84
Sample.....	84
Variables.....	86
Statistical Analyses .....	88
Results.....	89
Discussion .....	96

Limitations and Future Directions .....	99
Implications.....	100
Chapter IV References.....	102
 CHAPTER V - DISSERTATION CONCLUSION.....	 106
Implications.....	114
Limitations and Future Directions.....	118
Chapter V References .....	121

## **Introduction**

In industrial organizational psychology, there is a well-established link between worker job satisfaction and worker engagement in their job (Hersey, 1932; Wefald, & Downey, 2009; Zelenski, Murphy, & Jenkins, 2008). Similarly, research has found an association between a parent's satisfaction with their child's education services and a parent's level of involvement in their child's education (McWayne, Campos, & Owsianik, 2008; Rao, 2000; Soodak & Ervin, 2000). Levels of family involvement in their child's education as early as preschool have been correlated with positive academic and behavioral outcomes throughout childhood (Arnold, Zeljo & Doctoroff, 2008; Barnard, 2004; Miedel & Reynolds, 1999). This line of research posits that families who are satisfied with their child's education services are more likely to be involved in their child's education and, consequentially, their children are more likely to have positive academic and behavioral outcomes.

Based on the idea that Head Start asks families to work with their school and social services provider, this study conceptualized Head Start families more as engaged, working consumers rather than passive consumers. With this logic, both industrial organization psychology and education research shed light on how to engage Head Start families through evaluating families' levels of satisfaction in Head Start services. According to the theories proposed by industrial organization psychology and education research, this dissertation explores the potential links between satisfaction and involvement in Head Start services among U.S. born and immigrant families. To begin to understand the potential connection between satisfaction with services, engagement in services and the unique experiences of the immigrant communities in Head Start, this



study seeks to employ a mix of primary quantitative data and secondary quantitative data to examine satisfaction with and involvement in services among U.S. born and immigrant families in Head Start.

## **Objectives**

Family involvement in early education has consistently proven to be a predictor of higher educational attainment and positive outcomes for children (Arnold, Zeljo, Doctoroff & Ortiz, 2008; Barnard, 2004; Epstein, 1983). Improving levels of involvement in education for immigrant families appears to be exceptionally important. For immigrant children, family involvement shows a stronger correlation with positive child outcomes than that is seen in U.S. born children (Lahaie, 2008). Improving the level of family involvement in education for immigrant families requires an open dialogue and exchange of ideas with immigrant families to begin to understand the unique needs and objectives of each immigrant community. This dissertation aims to examine the relationship between satisfaction with and involvement in Head Start services for diverse immigrant families.

Policy makers and practitioners have begun to investigate how social services and education can better meet the needs of immigrant families. Roughly a quarter of U.S. children have at least one immigrant parent, or roughly 18.7 million children in America (Child Trends, 2014). This growing group of families enters into the social services and education systems with unique needs that often differ from U.S. born families. Immigrant families often bring legal, language and cultural needs for which teachers may not have adequate training or background.

With potentially complicated needs, establishing a cross-cultural method that would transcend the school's mainstream culture and cultural minorities within the school to increase engagement in Head Start services would provide a valuable tool for policymakers and schools. The concepts of satisfaction and involvement in Head Start services among diverse immigrant families remain an underexplored area of research. This dissertation represents the beginning of an area of inquiry that will explore the value of satisfaction with services in the Head Start community, particularly among diverse families.

Beyond the scholarly need for a better understanding of the concept of satisfaction, this study aims to provide a more pragmatic policy recommendation to help Head Start schools provide responsive services to their unique communities. At the most basic level, assessing levels of satisfaction in diverse Head Start families provides schools with a clearer picture of what is working and what needs improvement. Furthermore, given the potential association between satisfaction with services and involvement in Head Start services, accurately assessing satisfaction among diverse Head Start families provides schools with a tool for increasing involvement in their Head Start community. By developing an understanding of how satisfaction relates to involvement in Head Start services among diverse families, this study begins a potential line of inquiry that could provide Head Start schools with a valuable resource in their pursuit of improving family involvement in services.

## **Background**

Head Start preschools provide a unique schooling environment, which combines social services for families and preschool education for children. Head Start is a

federally-funded preschool program that serves low-income families and families with foster children. Head Start grew out of Lyndon B. Johnson's 1964 War on Poverty. In an attempt to develop a proactive approach to ending poverty in America, President Johnson appointed Sargent Shriver to head up the development of a program to ensure "that no American child be condemned to failure by the accident of his birth" (Johnson, 1965). As the Director of the newly created Office of Economic Opportunity, Shriver aimed to create an early childhood education program that would close the achievement gap between low-income children and middle to upper class children. After 50 years, Head Start has evolved from a community-based organization, into a preschool program with a two-generation approach to early childhood education. The two-generation approach means Head Start aims to engage children and their families equally. Children attend traditional preschool programming while their adult caregivers engage in social services aimed at addressing instabilities within the family.

Head Start preschool programs offer an ideal site to begin to explore diverse families' experiences with both social services and educational services because of the blended model of education that Head Start provides. Head Start's two-generation model of education also requires families to have more points of contact with their child's school than is typically seen in public, K-12 schooling. Head Start families are required to have home visits by Head Start case workers and teachers, and families may even be required to volunteer in the child's classroom depending on the school's policies (Zigler & Styfco, 2004).

With multiple points of contact between Head Start schools and their families, understanding how potential cultural and language differences between staff and families

impact how a family interacts with their child's school becomes even more significant. Some research has suggested immigrant parents struggle more to find a role in their child's education than U.S. born parents for fear of being unhelpful, or feeling self-conscious and uncomfortable in an unfamiliar educational system (Ji, & Koblinsky, 2009; Lamb-Parker et al., 1996; Moles, 1993; Ramirez, 2003).

### **Significance**

The United States receives, by far, the largest portion of the world's migrants. Nearly 20% of all the migrants in the world are destined for the U.S. In 2015, the United States hosted 47 million migrants. By contrast, the next highest number of migrants in 2015 was located in Germany, which hosted 12 million migrants (UN, 2016). With such a large group of families from all over the world entering the U.S., it comes as no surprise that Head Start is serving an increasingly diverse community of immigrant families. As of 2011, only 14% of Head Start preschools nationwide served an exclusively English speaking population of students (Sanchez Fuentes, 2011).

There are close to 5 million students learning English in the U.S. education system (Nation Center for Education Statistics, 2016). Comparatively, a meager 2.5% of teachers possess degrees in English as a second language or bilingual education (Ruiz-de-Velasco & Fix, 2000). This striking disparity leaves many schools ill prepared to help immigrant students. Head Start preschools have been found to improve children's language skills prior to entering into the K-12 public school system (Lahaie, 2008). This improvement in language skills is particularly effective for children of immigrants who may be learning English language skills for the first time in school (Lahaie, 2008). Given that nearly half of all immigrant families are living at an income level that makes them

eligible for Head Start, these promising results make Head Start a valuable asset to level the playing field for immigrant children entering the U.S. education system (Capps et al., 2004). Family involvement in early education is linked to increased language development and reading comprehension in children, making Head Start a potential tool to increase English language skills in ELL students entering the U.S. K-12 system which is inadequately prepared to help them (Arnold et al, 2008; McWayne, Hahs-Vaughn, Cheung, & Wright, 2012).

### **Theory**

A basic theoretical underpinning of this line of research is the notion that satisfaction correlates with involvement. This idea was first put forth in 1932 with the *Happy Productive Worker Theory* (Hersey, 1932). In industrial organization psychology and business research this theory postulates that an employee that is satisfied and happy with their work will be highly involved and consequentially, more productive in their work. Subsequent research has repeatedly confirmed a relationship between satisfaction with work and involvement in work (Wefald, & Downey, 2009; Zelenski, Murphy, & Jenkins, 2008).

This idea has been studied further in education and found that families that are satisfied with their child's school are more involved in their child's education (Fantuzzo et al, 2008; McWayne et al, 2008; Soodak & Ervin, 2000; Rao, 2000). Although this line of research in education is separate from *The Happy Productive Worker* theory, the underlying theory is essentially the same. Tying together industry research on workers and education research is the assumption that families and children are not passive consumers of services and rejects the notion that Head Start families and children are

“clients”. Families and children in education and Head Start are workers, working alongside service providers to produce positive outcomes for children. In Head Start, families and children are working with preschool educators to prepare children to enter kindergarten while parents are simultaneously working with social service providers to stabilize their home life.

Developing an understanding of families’ levels satisfaction with Head Start should help increase the understanding of how to create more involved and productive families, while creating a space where the voices of families and children involved with Head Start can be heard. Indeed, dissatisfaction is often a catalyst to change (Inglehart, 1977). Harnessing the knowledge of families involved in Head Start services through evaluating satisfaction in services provides Head Start schools and policymakers with the tools to work alongside families to create positive changes within the program. This idea is built on a bottom-up model that capitalizes on the knowledge and insight of the Head Start community rather than perpetuating a top-down approach that may be prone to deny and neglect the voices of low-income communities.

### **Conceptual Framework**

The conceptual framework for this research stems from both the orientation of the study itself and the orientation of the Head Start program. Head Start is built on an overt family systems theory approach to education. Family systems theory posits the idea that families cannot be understood as a collection of individuals; rather, families must be approached as a unit (Kerr & Bowen, 1988). Thus, Head Start provides an educational model that works with families as well as students. According to family systems theory, the idea that a student can be expected to excel in the classroom while ignoring an

unstable home or family situation would be rejected. This theory has strongly influenced the way Head Start has developed as a program and will consequentially inform how this research is conducted. In line with family systems theory, information that is collected will not be limited to the interactions of the school with the students. This research focuses almost exclusively on how families interact with their child's Head Start services. Family systems theory would posit that such questions are inextricably linked to a child's performance in Head Start.

A second theory plays a fundamental role in the community based approach to the primary data used in this research. Social constructivism is a post-modern approach that highlights the notion that the "client/worker" is the expert in his or her own life (Gergen, 1985). This theory suggests that reality is constructed out of understanding not out of objective facts. Objective facts are interpreted through understanding to create an individual's reality. This idea would reject the notion that there is one, central reality and embrace the idea that each individual has his or her own reality that is as valid as any other. In work with immigrant families this theory has become particularly useful in understanding the experiences and choices that families make. That is to say, this study will not approach an examination of how Head Start families interact with Head Start services from an "expert" or "top-down" approach. Rather, this study will look at how families understand their experiences with Head Start. Specifically, this study seeks to evaluate family's experiences with Head Start and their levels of satisfaction with services to see how this impacts a family's level of involvement and will not seek information from Head Start staff to evaluate each family's level of involvement. This study will also seek to understand satisfaction in services independent of any assessment

regarding the quality of services. In doing so, each family is afforded the opportunity to evaluate their own level of satisfaction and involvement in Head Start.

Family systems theory and social constructivism inform the methods chosen for this research. Based on family systems theory, this dissertation includes information on the families of students and asks about how the school is interacting with families. Based on social constructivism, this dissertation is, in essence, the product of a collaboration with Head Start staff and families to understand concepts they perceived as related to their own involvement in Head Start. Rather than approaching the idea of family involvement in a child's education with a structured, pre-existing definition, this framework allows for the individual interpretation of involvement. This line of studies began with a several month collaboration with two Head Start preschool programs that allowed the researcher to delve into discussions around what Head Start teachers and families felt was related to their own levels of involvement. Variables identified in those early collaborations were incorporated into all of the studies in this dissertation.

### **Three Paper Format**

The following is a three paper dissertation focused on exploring topics related to satisfaction and involvement in Head Start services among immigrant families. The data used in the three papers represents both primary data and secondary data. The first paper will draw from primary data collection to examine a measure of satisfaction in services among diverse immigrant groups. This paper seeks to evaluate the reliability of a single measure of satisfaction in services among immigrant families from diverse regions throughout the world. The second paper will draw from primary data collection to examine demographic variables and satisfaction in Head Start services to establish how



they associate with involvement in Head Start. This paper will seek to understand which variables are related to involvement in Head Start services and the strength of those associations. The third paper will draw from the most recently available Head Start Family and Child Experiences Survey data (FACES) from the year 2009 (U.S. Department of Health and Human Services, 2013), to examine which variables are predicted involvement in Head Start services among a larger, more diverse sample of Head Start parents. The third paper will examine a similar question to the question proposed in the second paper, but will include additional analysis among a more representative sample.

### **Paper One**

Paper one of this dissertation used primary data collection to examine the reliability of a measure of satisfaction in Head Start services among a diverse Head Start community. Prior to the start of this study, through the pre-existing partnership with Head Start, families at Head Start expressed the importance of their past experiences in determining their levels of involvement in future experiences with Head Start- essentially expressing dissatisfaction in previous experiences with Head Start predicted disengagement in future services. This information was informally collected through conversation and served as a catalyst to this line of research. In response, this study began an exploration of how satisfaction in Head Start relates to engagement in Head Start. To begin this line of research, this first study evaluated a measure of satisfaction in services across communities. This study drew from a diverse sample of immigrant and U.S. born Head Start families with children enrolled in Head Start. This study examined the Parent Satisfaction in Educational Experiences Scale (PSEE) (Fantuzzo, Perry, & Childs, 2006)

for reliability across male and female caregivers/parents, as well as U.S. born and immigrant caregivers/parents. The PSEE represents a 12-item scale used to measure parent satisfaction in their experiences with teachers, the classroom environment, and their communication with their school.

## **Paper Two**

Paper two of this dissertation used primary data collection to examine factors related to involvement in Head Start services among U.S. born and immigrant families. The study drew from a diverse sample of 196 parents and caregivers from 17 different countries including the U.S. This sample used the same sample that was used in paper one of the dissertation, but also added a second data collection time point, resulting in a larger dataset. Analysis examined demographic variables and satisfaction in services as they relate to involvement in services. Analysis employed bivariate and multivariate regression models to assess which demographic characteristics show any association with involvement in services and if satisfaction with services predicted involvement in services. Once bivariate analysis established which variables were associated with involvement, a multivariate analysis included all the variables that were associated with involvement to establish which variables showed stronger and weaker associations. Analysis examined both immigrant and U.S. born families to explore any potential differences between the two communities.

## **Paper Three**

Paper three of this dissertation examined a similar question to paper two; however paper three utilized a nationally representative secondary data source. The Head Start Family and Child Experiences Survey (FACES) is a federal dataset commissioned by the

Administration for Children and Families which funds and oversees the Head Start program (U.S. Department of Health and Human Services, 2013). FACES data are a large, publically available dataset that is widely used to examine Head Start programming and services. Due to the comprehensive information in the dataset and the ready availability of the dataset, FACES data has historically been one of the most prevalent secondary data sources in Head Start literature. Through the use of FACES data, this study examined predictors of involvement in Head Start services among a much more diverse, representative sample of families than was available in the second paper of this dissertation. Paper three used similar analytic methods as employed in paper two, examining which factors predicted involvement and then examining which variables showed stronger and weaker associations with involvement in Head Start. Paper three also examined parent education as it related to involvement in services. Similar to previous research on parent involvement in education, this study found parents' level of education to be associated with involvement in services (Fantuzzo, Perry, and Childs, 2006; McWayne, et al, 2008). Logically, this relationship may be mediated or moderated by parents' employment status. To explore this potential relationship, this study utilized an interaction analysis and a KHB analysis to establish how parents' education, parents' employment, and involvement in Head Start services are related.

## **Conclusion**

Taken together as a body of work, this dissertation represents an entry into an area of research that has been largely unexplored in the literature. Examinations around immigrant family involvement in Head Start are limited and often focus on linguistic and cultural barriers to engagement (see e.g. Suárez-Orozco & Suárez-Orozco, 2001; Turney

& Kao, 2009). Despite the limited research on immigrant family involvement in Head Start, there is a line of existing research on U.S.born and immigrant family involvement in early childhood education. This research has repeatedly demonstrated the value of family involvement in early childhood education, and has shown particular benefits to immigrant families when families are involved in their child's education in improving school readiness for students entering the K-12<sup>th</sup> grade education system (Lahaie, 2008). Furthermore, Head Start preschools rely on a unique 2-generation approach to education that works with both the parents/caregivers and the children; this 2-generation approach to education necessitates highly involved parents/caregivers.

The line of research presented here seeks to explore if and how immigrant families differ in their levels of involvement in Head Start services, and if a single concept, such as satisfaction in services could be a tool to increase engagement in services across populations. In an effort to provide applicable, pragmatic solutions to issues faced in Head Start preschools, this body of work focuses on fundamental concepts and tools that can be used in under-resourced preschools. This simple concept provides Head Start preschools and policymakers with a potentially easily implemented intervention to increase engagement and provide responsive services to a diverse community.

## References

- Arnold, D. H., Zeljo, A., Doctoroff, G. L., & Ortiz, C. (2008). Parent Involvement in Preschool: Predictors and the Relation of Involvement to Preliteracy Development. *School Psychology Review*, 37(1), 74–90.
- Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review*, 26(1), 39–62.
- Capps, R., Fix, M., Murray, J., Ost, J., Herwanto, S., & Passel, J. (2004). *Promise or Peril : Immigrants , LEP Students and the No Child Left Behind Act*. Washington, DC. Retrieved from <http://fcd-us.org/sites/default/files/PromiseOrPeril.pdf>
- Child Trends. (2014). *Immigrant children*. Available at: <https://www.childtrends.org/?indicators=immigrant-children>
- Epstein, J. L. (1983). Longitudinal effects of family-school-person interactions on student outcomes. In A. Kerckhoff (Ed.), *Research in sociology of education and socialization* (Vol. 4, pp. 101-128). Greenwich, CT
- Gergen, K. (1985). The Social Constructionist Movement in Modern Psychology. *American Psychologist*, 40(3), 266–275.
- Hersey, R. (1932). *Workers' Emotions in Shop and Home*. Philadelphia, PA: University of Pennsylvania Press.
- Fantuzzo, J., Perry, M. A., & Childs, S. (2006). Parent satisfaction with educational experiences scale: A multivariate examination of parent satisfaction with early childhood education programs. *Early Childhood Research Quarterly*, 21(2), 142–152.
- Inglehard, R. (1977) Political Dissatisfaction and Mass Support for Social Change in Advanced Industrial Society. *Comparative Political Studies*, 10(3), 455-472

- Ji, C. S., & Koblinsky, S. a. (2009). Parent Involvement in Children's Education: An Exploratory Study of Urban, Chinese Immigrant Families. *Urban Education*, 44(6), 687–709. Retrieved from <http://uex.sagepub.com/content/44/6/687.short>
- Johnson, L.B. (1965, August 31) Remarks on Announcing Plans To Extend Project Head Start. Gerhard Peters and John T. Woolley, *The American Presidency Project*. Retrieved From <http://www.presidency.ucsb.edu/ws/?pid=27204>.
- Kerr, M., & Bowen, M. (1988). *Family Evaluation*. New York, NY: W. W. Norton & Company, Inc.
- Lahaie, C. (2008). School Readiness of Children of Immigrants: Does Parental Involvement Play a Role? *Social Science Quarterly*, 89(3), 684–705.
- Lamb-Parker, F., Piotrkowski, C., Kessler-Sklar, S., Baker, A. J. L., Peay, L., & Clark, B. (1997). *Parent involvement in Head Start: Final report: Executive summary*. New York, NY.
- McWayne, C., Campos, R., & Owsianik, M. (2008). A multidimensional, multilevel examination of mother and father involvement among culturally diverse Head Start families. *Journal of School Psychology*, 46(5), 551–573.
- McWayne, C. M., Hahs-Vaughn, D., Cheung, K., & Wright, L. G. (2012). National profiles of school readiness skills for Head Start children: An investigation of stability and change. *Early Childhood Research Quarterly*, 27, 668–683.
- Miedel, W. T., & Reynolds, A. J. (1999). Parent involvement in early intervention for disadvantaged children: Does it matter? *Journal of School Psychology*, 37, 379–402.
- Moles, O. (1993). Collaboration Between Schools and Disadvantaged Parents: Obstacles and Openings. In N. Chaukin (Ed.), *Families and Schools in a Pluralistic Society*. Albany, NY: State University of New York Press.

- National Center for Education Statistics (2016, May) *English Language Learners in Public Schools*. Retrieved from [https://nces.ed.gov/programs/coe/indicator\\_cgf.asp](https://nces.ed.gov/programs/coe/indicator_cgf.asp)
- Ramirez, A. Y. F. (2003). Dismay and disappointment: Parental involvement of Latino immigrant parents. *The Urban Review*, 35(2), 93–110.
- Rao, S. (2000). Perspectives of an African American Mother on Parent-Professional Relationships in Special Education. *Mental Retardation*, 38(6), 475–488.
- Ruiz-de-Velasco, J., & Fix, M. (2000). *Overlooked and Underserved: Immigrant students in U.S. Secondary Schools*. Washington, DC. Retrieved from <http://files.eric.ed.gov/fulltext/ED449275.pdf>
- Sanchez Fuentes, Y. (2011). Head Start Today: A look at Demographics and Culture and Linguistic Responsiveness. In *Advisory Committee on Head Start Research and Evaluation*.
- Soodak, L. C., & Erwin, E. J. (2000). Valued member or tolerated participant: Parents' experiences in inclusive early childhood settings. *Journal of the Association for persons with severe handicaps*, 25(1), 29-41.
- Suárez-Orozco, C. & Suárez-Orozco, M. (2001) *Children of Immigration*. The United States of America, President and Fellows of Harvard College
- Turney, K., & Kao, G. (2009). Barriers to School Involvement: Are Immigrant Parents Disadvantaged? *The Journal of Educational Research*, 102(4), 257–271.
- Nations, U. (2016). International Migration Report 2015, 32. Retrieved from [http://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2015\\_Highlights.pdf](http://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2015_Highlights.pdf)
- U.S. Department of Health and Human Services (2013) *Head Start Family and Child Experiences Survey (FACES): 2009 Cohort*. Washington, DC. Author

- Wefald, A. J., & Downey, R. G. (2009). Construct dimensionality of engagement and its relation with satisfaction. *The Journal of Psychology, 143*(1), 91–111.
- Zelenski, J. M., Murphy, S., & Jenkins, D. (2008). The happy-productive worker thesis revisited. *Journal of Happiness Studies, 9*, 521–537. <http://doi.org/10.1007/s10902-008-9087-4>
- Zigler, E. & Styfco, S. (eds) (2004) *The Head Start Debates*. Baltimore, MD. Paul H Brookes Publishing



**Measuring Satisfaction in Head Start Services  
in Immigrant and U.S. Born Families**

## **Abstract**

**Background:** Accurately assessing caregiver satisfaction in their child's education creates an opportunity for two-sided conversations between caregivers and schools. Open dialogue between caregivers and their child's school is likely to foster increased family involvement in a child's education. In response to the need for accurate assessment of caregiver satisfaction, Fantuzzo, Perry and Childs (2006) created the Parent Satisfaction in Educational Experiences Scale (PSEE) specifically for low-income caregivers of preschool aged children attending Head Start preschool programs as well as caregivers of kindergarten students. Although the PSEE presents an opportunity to engage caregivers, the measure has not yet been validated on a sufficient sample of caregivers born outside of the U.S.

**Methods:** This study seeks to evaluate the use of the PSEE in immigrant and U.S. born caregivers. The study draws from a sample of N=141 diverse, urban Head Start caregivers. 22.7% of caregivers identified as male and the remaining 77.3% identified as female. 52.1% of caregivers were born outside of the U.S., hailing from 15 different countries. To account for language barriers in caregivers born outside the U.S., the PSEE was administered in the five most predominant languages: English, Spanish, Cape Verdean Creole, Haitian Creole and Vietnamese.

**Results:** Analysis indicates the PSEE maintains strong reliability in caregivers born outside of the U.S. but lower reliability scores in U.S. born male caregivers. Factor analysis shows the proposed three-factor solution of the PSEE does not maintain a good fit among this highly diverse sample.

**Implications:** Although conclusive evidence is limited with this small sample, results suggest further explorations into the use of the PSEE among male caregivers is warranted. This study highlights the strengths of the PSEE in assessing caregiver satisfaction among immigrant families while drawing attention to the need for further research into validating the PSEE among U.S. born male caregivers.

## **Introduction**

Caregiver satisfaction in his/her child's education is a largely underexplored area of research. Of the very limited research that does exist on caregiver satisfaction in education, the overwhelming majority has focused on primarily female, U.S. born caregivers. Research in this relatively homogenous group of caregivers has indicated a positive relationship between caregiver satisfaction and caregiver involvement in their child's education (McWayne, Campos, & Owsianik, 2008). In an effort to begin to accurately measure satisfaction in education across diverse communities, this study aims to assess the reliability and validity of the only existing tool exclusively dedicated to measuring caregiver satisfaction in educational experiences among Head Start preschool families. To ensure this study includes the myriad of family structures found in Head Start, the study intentionally includes all child caregivers rather than limiting the sample to parents. Many immigrant families and first generation immigrant families in the U.S. rely on non-nuclear family structures (Foner, 1997; Leach, 2012). Thus aunts, uncles, grandparents, older siblings, etc. are included in the term "caregiver."

Although the body of literature on caregiver satisfaction remains extremely limited, the body of literature on caregiver involvement is burgeoning. Caregiver involvement in their child's education is a vital factor in improving outcomes for youth and increasing academic achievement (Arnold, Zeljo, & Doctoroff, 2008; Barnard, 2004; Miedel & Reynolds, 1999). Though some research does exist in this area, it is extremely limited and often omits diverse racial and immigrant communities. These relationships have not been adequately explored in varied racially and ethnically populations, and very little literature exists on caregiver satisfaction among immigrant caregivers (McWayne et

al., 2008). Much of our understanding of caregiver involvement in their child's education is based on measurements developed with linguistically and culturally homogeneous groups of caregivers (Hall & Schaverien, 2001; McBride, Bae & Wright, 2002). Cultural influences on parenting behaviors often create subtle differences in the way parents interact with their child's education (Lee, 2005; López, 2001; McWayne, Melzi, Schick, Kennedy, & Mundt, 2013; Tamis-Lemonda, Kahana-Kalman & Yoshikawa, 2009). These differences have left the research community struggling to operationalize satisfaction or involvement in education across populations. Without a strong definition of satisfaction or involvement in education that can span culture, and language developing culturally competent measures of these concepts is exceptionally challenging. Although there has been an abundance of literature on caregiver involvement in education, there has not been a similar level research on caregiver satisfaction with education.

The Parent Satisfaction in Educational Experiences Scale (PSEE) (Fantuzzo, Perry & Childs, 2006) is to date the only measure of caregiver satisfaction designed by and for Head Start families. The PSEE was developed in collaboration with urban schools and families and later validated on a sample of urban Head Start parents. This 12-question measure examines caregiver satisfaction with their child's school based on three submeasures that evaluate satisfaction in teacher contact, satisfaction in classroom contact, and satisfaction in school contact. Despite the accomplishments in developing the PSEE, the authors noted some limitations and called for further research. The PSEE was developed with a sample of predominantly Black and Caucasian participants and has, to date, not been evaluated with two of the largest and fastest growing minority groups in the U.S.- Asians and Latinos (Fantuzzo et al., 2006; U.S. Census, 2013). The initial

validation work of the PSEE also lacked a sufficient sample of men to validate the measure. The sample of parents involved with the development of the PSEE was 93.6% female, 59.5% African American and 26.3% Caucasian (Fantuzzo et al., 2006). The absence of sufficient representation of certain racial and ethnic groups and the predominance of female caregivers make the initial validation sample less useful for many communities. Given the high proportion of immigrants in low-income communities served by Head Start, the absence of any previous validation work done of the PSEE in diverse populations is a major concern in the use of the scale.

### **Parent Satisfaction and Involvement in Education**

Caregiver satisfaction, as an independent construct, has had very little attention in the research literature. The overwhelming majority of research on caregiver satisfaction has focused on the relationship between satisfaction and involvement. Some work has been done around the topic of caregiver satisfaction in services for children with special needs (see, e.g. Park & Turnbull, 2001; Rao, 2000; Summers, Hoffman, Marquis, Turnbull, & Poston, 2005). Much of the literature around satisfaction in caregivers with children with special needs has reinforced the connection between satisfaction and involvement (Laws & Millward, 2001). Furthermore, qualitative studies have suggested parents that have very low levels of satisfaction in services for their child show higher levels of stress, may feel less inclined to participate in decision making around services for their child and may even be inclined to drop out of services all together (Rao, 2000; Soodak & Ervin, 2000). In the existing literature around caregiver satisfaction, it is plain to see the value in assessing and responding to levels of satisfaction to prevent negative outcomes for families. Although this body of literature has grown around services for

children with special needs, it is possible similar lessons extend to early childhood education.

The close associations between caregiver satisfaction in education and caregiver involvement in education highlights the value of exploring both constructs in diverse communities. Previous research on parent involvement in traditional models of education has highlighted that low-income parents tend not to engage in education in many of the ways that research has traditionally defined and measured involvement, lending to the perception that low-income parents are less involved in education (Arnold et al., 2008). Although it is possible that low-income parents engage in education in ways that the research community is not yet measuring, the current assumption that low-income parents are less engaged than high or middle income parents brings up new questions regarding the long term impacts of low-income preschool programs such as Head Start.

### **Parent Satisfaction and Involvement in Head Start Preschools**

The Head Start preschool program provides a unique opportunity to assess the impact of caregiver satisfaction in education due in part to the two-generation approach. Head Start preschools provide traditional school services for children enrolled in the schools while also providing social services for parents and caregivers, as well as mental and physical health care for families (McWayne, Green & Cheung, 2010). This unique, family-based education model creates more points of contact between families and schools, giving caregivers more experiences with the school.

Preschool programs operating on a two generation education model similar to Head Start have been correlated with increased High School completing and positive long-term educational achievement in low-income students (Reynold et al., 2011;

Schweinhart, 1993). Such positive academic achievements in low-income students would seem to contradict the assumption that low-income parents are less involved in their child's education. Even as early as preschool, parent involvement in a child's education is related to academic achievement later on. Low-income parents that are highly involved in their child's education in preschool and kindergarten have children with higher preliteracy skills in childhood, higher reading achievement rates in adolescence, and lower grade retention rates at age 14 (Arnold et al., 2008; Miedel & Reynolds, 1999). Similarly, parent involvement in their child's grade school education is positively correlated with children's subsequent graduation from high school (Barnard, 2004). Such discrepancies between the perceived levels of involvement and outcomes for youth highlight the needs for accurate measurement.

### **Measuring and Defining Parent Satisfaction and Involvement**

Measuring the experience of parenting in different countries and cultures is challenging. Culture and gender norms often dictate parenting roles, such as how to engage in a child's education (Campos, 2008; Lee, 2005; López, 2001; Tamis-LeMonda et al., 2009). With such a varied understanding of how parents should interact with their child's education, measuring parental involvement across cultures in any standardized, generalizable way is problematic. Epstein (1987) theorized a 6-point definition of parental involvement in education including: parenting behaviors, communicating between home and school, volunteering in the school, learning at home, decision-making, and collaborating with the community. Although the Epstein (1987) theory provides an often-cited framework for understanding parent involvement in education, the field still struggles to create a concrete, measurable definition of involvement.

Similar to involvement, caregiver satisfaction in education has struggled to develop a concrete, operationalization of what it means to be satisfied (Schwartz & Baer, 1991). McNaughton (1994) conducted an analysis of tools used to measure parent satisfaction in any form of education up until the mid-1990's. McNaughton (1994) succinctly laid out a history of the four primary reasons to measure and value caregiver satisfaction in education. McNaughton (1994) points out that (1) parents and caregivers retain control and responsibility for their child's development and wellbeing thus caregiver feedback should retain primacy in program evaluation (Bernheimer, Gallimore, & Weisner, 1990; Guralnick, 1989), (2) caregiver satisfaction and dissatisfaction can be used to shape and improve services (Upshir, 1991; Wolery, 1987), (3) caregiver participation in their child's education is likely increased by including caregiver evaluations of the schools (Baily, 1987; Conn-Powers, Ross-Alle & Holburn, 1990) and (4) consumer satisfaction data can be a useful tool in securing funding (Scheirer, 1978). The logic in McNaughton's review of the measurement of satisfaction in research literature is as applicable today as it was twenty years ago, and it most certainly represents an area of knowledge that has been overlooked for two decades.

Despite the pragmatic uses and significance of caregiver satisfaction in caregiver involvement, measuring caregiver satisfaction has historically been problematic. Prior to 1994, most measures of caregiver satisfaction had not yet addressed concerns around accurately measuring caregiver satisfaction in diverse communities. The majority of measures used to assess satisfaction were not validated, not standardized and were largely unreported in the methodology in the literature (McNaughton, 1994). To date, very little research exists on caregiver satisfaction in education. The topic of caregiver satisfaction



in early education remains particularly unexplored. In the absence of adequate measurement tools around the topic of caregiver satisfaction in early education, the potential implications of the construct remain unknown.

In response to the need to develop an established measure of caregiver satisfaction, Fantuzzo et al. (2006) developed the Parent Satisfaction in Educational Experiences Scale. The measure presented an opportunity for the research community to begin to understand the relationship between satisfaction and any number of possible constructs as well as an opportunity for service providers to assess their program. The PSEE was developed with input from parents and teachers in an urban school setting. The measure is brief, easy to read, and straight forward enough for schools to use to gain feedback from families and facilitate communication to improve the school community (Fantuzzo et al., 2006). The PSEE represents a practical tool that could potentially serve a large, diverse array of communities if it maintains reliability across cultures.

### **Parent Satisfaction and Involvement in Immigrant Communities**

Cultural barriers to measuring and understanding caregiver satisfaction and involvement pose challenges in the diverse cultural communities within the U.S., but particularly large challenges exist in measuring parenting behaviors in ethnic minority and immigrant communities. Very few studies examining parent satisfaction in the U.S. have included immigrant parents (McWayne et al., 2008). Research does exist examining immigrant parent involvement in education. This research has largely concluded that parents from diverse communities interact with their child's education in unique ways in both Head Start schools and traditional schools (Campos, 2008; Lee, 2005; McWayne et al., 2008; McWayne et al., 2013). Challenges arise when the cultural framework of a

school are incongruent with the cultural framework of a family and parenting styles, often marginalizing or disengaging minority culture families (Hill, 2010). For example, several studies have suggested Southeast and East Asian immigrant communities perceive their place in their child's education differently than many U.S. schools. (Arzubiaga, Nogueron, & Sullivan, 2009; Garcia-Coll, et al, 2002; Ji & Koblinsky, 2009). For many families immigrating to the U.S. from Southeast or East Asia, adapting to the Socratic method of education in the Western world presents many barriers. Asian schooling is generally based in the Confucian tradition emphasizing rote memorization, the teacher as an authority figure, and obedience. Conversely, the Socratic method typically places teachers and students as equals and emphasizes critical thinking and debate as a tool for learning (Aoki, 2008). These conflicting orientations create confusion and frustration in parent- school interactions such as parent teacher conferences and even report cards sent home with students (Ji & Koblinsky, 2009).

Combating a sense of marginalization in cultural minority families requires bi-directional conversations with families. Sumsion and Goodfellow (2006) analyzed past attempts at researching and adjusting public services in early childhood education and care in Australia to improve quality through a supply and demand model. The results showed the majority of research and policy adjustments in early childhood education have focused on the supply side- meaning little input regarding satisfaction in service has been gathered. In this supply and demand model, it can certainly be argued that Head Start has also focused largely on supply side research, without similar focus on what service recipients would like to receive. In other words, research and policy in Head Start has been largely conducted from the theoretical model of "experts" and "clients." In this

model, experts conduct research and create policy initiatives while clients simply do as they are instructed. Input from clients is minimal and seldom asks questions regarding the client's perspectives or preferences. The absence of literature regarding satisfaction in Head Start services is a testament to the minimal focus on community-based perspectives of Head Start families. In the absence of caregiver input, Head Start preschools are unable to appropriately adjust to their unique communities and may disengage and marginalize cultural minority families.

This study seeks to evaluate the validity of the PSEE in a linguistically, culturally diverse Head Start community. The PSEE represents a unique opportunity for Head Start that is not currently reaching its full potential. Given the potential importance of satisfaction in influencing levels of involvement in Head Start services, a cross culture method of evaluating satisfaction in the Head Start community would prove a valuable tool. As Fantuzzo et al. (2006) noted, "School administrators have an opportunity to create bi-directional communication to foster genuine parent involvement. To realize this opportunity, administrators will need culturally sensitive and practical means to determine parental satisfaction with various aspects of their school contact." (p. 144).

## **Methods**

### **Procedure**

As this was a pilot study, the sample was relatively small but diverse. The sample was collected in the fall of 2013 from an urban Head Start preschool serving children aged three to five. The sampling method was developed with the assistance of the Head Start staff and the Head Start's Parent Advisory Committee. All Head Start programs have, to some degree, a committee of parents that advise the school administration on

everything from school curriculum to hiring and firing staff. In an effort to better partner with the school and draw upon the expertise of the families and staff, the research team met with the Parent Advisory Committee as well as school staff prior to administering any measures with the school's families. As advised by the families and staff, questionnaires were administered to caregivers as they arrived at the school to drop their child off in the morning or as they arrived at school to pick their child up in the evening. Records were maintained to ensure each caregiver completed each survey only once; however, children with multiple caregivers were permitted to allow each caregiver to complete the surveys. Teachers took care of children while caregivers completed the questionnaires. Caregivers received a \$25 gift card to a local store for their participation. The Institutional Review Board at Boston College approved all data collection procedures and all participants consented to partake in this study.

All surveys were distributed on paper. To accommodate caregivers with limited English proficiency, research documents were translated by a professional translation service into the 5 predominant languages at the school: English, Spanish, Vietnamese, Haitian Creole and Cape Verdean Creole. All documents contained written instructions to allow research staff to administer surveys to caregivers regardless of any language barriers between families and the research team.

### **Sample**

The Head Start was situated in an ethnically diverse community and serves a large number of recently immigrated families from a wide range of countries. The Head Start contained both an Early Head Start program serving children from birth to three years of age, and a traditional Head Start program, serving children age 3-5. The school served a

total of 300 families between both the Early Head Start program and the Head Start program, all data was collected from only the Head Start program serving children aged 3-5. All information collected in the study was self-reported, including demographic information. The sample is a convenience sample taken from a Head Start preschool engaged in an ongoing partnership with the research team. A total of 141 Head Start caregivers agreed to participate in the study. Slightly less than half of the sample participants (47.9%) were born in the United States and 52.1% were born outside of the United States. The majority were women; however, the study included slightly more men than is typical in Head Start samples. In the sample, 22.7% identified as male and 77.3% identified as female. Ethnically, the majority of participants identified as non-Hispanic Black (43%) or Black Hispanic (12%). In total, the 141 participants included 121 parents, 6 grandparents, 10 aunts or uncles, 1 caregiver identified as “Other” and 3 caregivers did not identify their relation to their child (Table 1).

**Table 1.** Sample Demographics (N=141)

<b>Gender</b>	<b>Race</b>	<b>Place of Birth</b>	<b>Birth Countries among Foreign Born</b>
22.7% Male	43% Non-Hispanic	47.9% Born in U.S.	13% Haiti
77.3% Female	12% Black		8% Cape Verde
	10.5% Black Hispanic	52.1% Born Outside U.S.	7% Dominican Republic
	9% White Hispanic		6% Vietnam
	9% Asian or Pacific Islander		4% Jamaica
	8% Hispanic		3% Puerto Rico
	7% Non-Hispanic white		1.5% Barbados
	9.5% Biracial		1.5% Dominica
	Other		1.5% Mexico
			1% Guatemala
			1% Nigeria
			1% Trinidad
			1% Venezuela
			1% Sierra Leone

## Measure

The PSEE was developed by and for urban Head Start families. This questionnaire represents the only instrument specifically designed to measure levels of caregiver satisfaction in Head Start's unique model of education (Fantuzzo et al., 2006). The PSEE includes 12 questions describing three areas of contact with the school (i.e. teacher, administrator, and classroom). Each item on the PSEE is rated on a 4 point-Likert scale ranging from *very satisfied* to *very dissatisfied*, indicating the caregiver's level of satisfaction with each area of school contact.

The calculation procedure of the PSEE focuses on the use of the three submeasures within the overall PSEE. The PSEE is a relatively new measure and the calculation procedures are still in the process of fine-tuning to ensure the measure is as accurate as possible. At the time of data collection and analysis, calculating the scores of the PSEE to create an evaluation of each area of satisfaction relies on the summation of

each of the questions in the submeasures to create three sum scores. For example, questions number 1, 2, 4, and 5 are summed to give a score that indicated the level of satisfaction with classroom contact. Sum scores can be standardized to allow comparison between each submeasure. The PSEE does not emphasize utilizing the entire measure as a 12-item measure of general satisfaction; rather, the measure provides an emphasis on the use of the three submeasures (Fantuzzo et al., 2006). Given the focus on the submeasures in scoring and interpreting the PSEE, this analysis will also provide equal focus on evaluating the submeasures in the PSEE.

Previous detailed validation work on the PSEE is limited to the development work done by Fantuzzo et al. (2006). In the development of the PSEE, factor analysis focused on a three-factor, varimax solution, which produced adequate internal consistency. In the three factor solution, alpha levels remained above  $\alpha=.70$  for each of the submeasures: teacher contact ( $\alpha=.82$ ), classroom contact ( $\alpha=.82$ ) and school contact ( $\alpha=.75$ ) (Fantuzzo et al., 2006).

## **Analysis**

Reliability of the PSEE was assessed across 4 subsamples using STATA 12. Initial analysis examined Cronbach's Alpha levels and item rest statistics across subsamples drawn from the original sample. Chronbach's Alpha statistics indicate how well the all items on a measure "tie together" to capture the construct being measured, whereas item-rest statistics indicate how well each item within the measure "ties" to all the other items within the measure (Tran, 2009).

The original sample was broken into a male-female gender dichotomy, then into a U.S Born-Foreign Born birthplace dichotomy. Dichotomies were compared to one

another on Cronbach's Alpha levels and item rest statistics for inconsistencies indicative of threats to cross cultural reliability. Later, all 4 subsamples of U.S. Born Female, Foreign Born Female, U.S. Born Male, and Foreign Born Male were compared on Cronbach's Alpha levels and item rest statistics for inconsistencies. Participants that were members of the same family were analyzed separately rather than in a paired-analysis for two reasons: (1) the child or family is not the unit of measurement, rather the individual caregiver is the unit of measurement and (2) it cannot be assumed that caregivers agree with one another. Certainly, it is likely that caregivers may influence one another, but that influence would likely be on the caregiver's level of satisfaction not on the reliability and validity of the measurement of satisfaction.

The PSEE was then assessed using a confirmatory factor analysis across the entire sample. Due to the small sample size, an exploratory factor analysis was not conducted on each subsample for comparison; rather, a confirmatory factor analysis was conducted on the entire 141-person sample to assess the proposed 3-factor solution. As noted earlier, the original validation of the PSEE lacked a sufficient sample of male Latino and Asian participants. Attempting a confirmatory factor analysis on this sample will explore if the proposed 3-factor solution maintains adequate fit with a sample that includes more diverse linguistic and immigrant communities.

## **Results**

### **Cross-Gender Comparison**

Results of the cross-gender comparison show the overall PSEE maintains an acceptable Cronbach's Alpha level above .70 (Tran, 2009). The acceptable overall alpha levels point toward a strong cross-gender reliability of the PSEE, however, the item-rest



correlations point toward inconsistencies within the measure. Given the emphasis on the three submeasures in the PSEE, inconsistencies within the measure are reason for concern. These varying scores among the item-rest correlations indicate individual questions are not “performing” similarly across groups. Although those discrepancies may even out in the end of the measure to give the measure an overall acceptable Cronbach’s Alpha score, the variability within the measure indicates when each question is examined individually, it may not hold similar levels of reliability across groups. Taken together, given the small number of questions per submeasure, this may indicate a threat to the proposed three submeasures while supporting the overall, unidimensional measure of satisfaction.

**Table 2.** Cronbach’s Alpha & Item-Rest Correlation for Gender Comparison

	Male n=32	Female n=109
Classroom Planning	.232	.570
Volunteering in Class	.486	.443
Phone Contact with Teacher	.665	.639
Support for Parent Involvement	.663	.731
Participation in Decision Making	.756	.781
Notes from Teacher	.611	.707
Contact with Other Parents	.737	.682
Parent Workshops	.568	.703
Contact with Teacher About Child Behavior	.537	.748
Contact with Administration	.608	.594
School Work Sent Home	.556	.690
Support for Culture or Language	.606	.738
Alpha	.882	.920

With the variability across each question shown in the item-rest correlation, an examination of the submeasure Cronbach's Alpha levels is necessary to assess if the submeasures maintain reliability across groups. Each submeasure in the PSEE relies on only four questions to assess each of the three constructs- teacher contact satisfaction, classroom contact satisfaction and school contact satisfaction. With such a small number of questions assessing each construct, variability on any one question can greatly affect the reliability of each submeasure. The submeasure Cronbach's Alpha scores are all notably lower than the overall Cronbach's Alpha level for the 12-item PSEE. All of the Cronbach's Alpha scores for the submeasures for both men and women remain above the .70 mark, indicating strong reliability, with the exception of the Cronbach's Alpha score for male caregiver's satisfaction in their classroom contact. The Cronbach's Alpha score for men assessing their level of satisfaction with classroom contact shows a somewhat lower score of  $\alpha=.670$ , meaning men's assessments of their satisfaction with their child's classroom shows weaker reliability (Tran, 2009).

### **Cross-Birthplace Comparison**

Examining this preliminary analysis of the PSEE among participants born in the U.S. and participants born outside the U.S. shows similar concerns as those seen in the cross-gender analysis. The overall alpha levels of the PSEE for the groups born in the U.S. and the group born outside the U.S. remain at strong levels; however a significant amount of variability is seen in the item-rest correlations. Again, this supports the notion of a unidimensional measure of satisfaction but threatens the three unique submeasures within the PSEE.

**Table 3.** Cronbach's Alpha & Item-Rest Correlation for Birthplace Comparison

	Born in U.S. n=68	Born Outside U.S. n=73
Classroom Planning	.429	.552
Volunteering in Class	.432	.478
Phone Contact with Teacher	.700	.615
Support for Parent Involvement	.687	.742
Participation in Decision Making	.742	.799
Notes from Teacher	.720	.681
Contact with Other Parents	.646	.734
Parent Workshops	.743	.638
Contact with Teacher About Child Behavior	.843	.623
Contact with Administration	.741	.490
School Work Sent Home	.531	.758
Support for Culture or Language	.818	.661
Alpha	.916	.913

The submeasures in the PSEE once again show slight threats to the reliability of the PSEE in the measure of satisfaction with classroom contact. All other submeasures in the PSEE show Cronbach's Alpha scores over .70 for both U.S. born families and families born outside the U.S. except for the submeasure on classroom contact. The Cronbach's Alpha score for individuals born inside the U.S. assessing their level of satisfaction in classroom contact falls slightly below an acceptable score of  $\alpha=.70$  and shows an alpha level of  $\alpha=.67$ . The alpha levels of each submeasure drop to lower levels than were seen in the overall PSEE alpha scores, however, only the measure of classroom contact satisfaction for U.S. born participants drops below  $\alpha=.70$  (Tran, 2009).

### **Cross-Birthplace and Gender Comparison**

Dividing each subsample into further subsample allows us to narrow down which groups, specifically, show particular threats to the reliability of the PSEE. However, it

should be noted that by dividing this already small sample into four subsamples, these analyses must be considered the most preliminary, particularly among U.S. born males, where the sample drops to only 11 participants.

Much like the cross-gender and cross-birthplace comparisons, the cross-gender and birthplace comparison show acceptable overall alpha levels but high variability in the item-rest correlations. Variability in the item-rest correlations among the four subsamples seen in Table 4 is notably high, indicating individuals question in the PSEE “behave” differently in each subsample, which may pose a threat to the submeasures within the PSEE given the small number of questions within each submeasure.

**Table 4.** Cronbach’s Alpha & Item-Rest Correlation for Gender and Birthplace Comparison

	U.S. Born Male n=11	U.S. Born Female n=57	Born Outside U.S. Male n=21	Born Outside U.S. Female n=52
Classroom Planning	-.02	.56	.40	.57
Volunteering in Class	.57	.41	.45	.47
Phone Contact with Teacher	.67	.71	.68	.58
Support for Parent Involvement	.75	.72	.70	.74
Participation in Decision Making	.33	.78	.84	.77
Notes from Teacher	.80	.74	.56	.71
Contact with Other Parents	.51	.66	.81	.70
Parent Workshops	.26	.85	.77	.62
Contact with Teacher About Child Behavior	.76	.86	.54	.68
Contact with Administration	.58	.78	.55	.49
School Work Sent Home	.37	.59	.73	.76
Support for Culture or Language	.67	.84	.57	.68
Alpha	.832	.904	.900	.913

Based on the result of the previous cross-gender and cross-birthplace analysis, it is expected to see the lower Cronbach's Alpha level of the assessment of satisfaction with classroom contact among U.S. born males of  $\alpha=.402$ . This score represents the lowest Cronbach's Alpha level found in this cross-gender, cross-birthplace analysis and certainly indicates an area for further research. These low alpha scores indicate the PSEE measure of satisfaction in school contact does not have a strong reliability among U.S. born males in this sample and may produce varying results.

### **Confirmatory Analysis of the 3-Factor Structure in The PSEE**

Concerns over the Cronbach's alpha levels raise question about the 3-factor structure proposed for the PSEE. Given the discrepancies between the Fantuzzo et al., (2006) proposed 3-factor solution within the PSEE and the outcomes of the exploratory Cronbach's Alpha analysis in this more diverse sample, a confirmatory factor analysis was conducted to evaluate the fit of a 3-factor solution. The sample is too small to accurately conduct a confirmatory factor analysis when the sample is split into subgroups, thus one confirmatory analysis was conducted on this group as whole. This group represents a more diverse sample than that seen in Fantuzzo et al. (2006) sample and can shed light on how well the 3-factor solution fits in diverse communities. As seen in Table 5, the three-factor solution did not fit this more diverse sample. These results indicate the proposed structure of the PSEE does not fit when the PSEE was administered to this diverse sample and proposes there may be threats to the validity of the PSEE in diverse populations. However, overall scores as noted earlier maintain acceptable levels of reliability, suggesting the PSEE may be better suited to measure a unidimensional construct of satisfaction in a more diverse sample.

**Table 5.** Goodness of Fit Statistics for 3-Factor Solution of the PSEE

chi2_ms(51)	187.41
p > chi2	0.000
chi2_bs(66)	933.255
p > chi2	0.000
RMSEA	0.146
AIC	266.391
BIC	2744.006
CFI	0.813
TLI	0.796
SRMR	0.066

RMSEA: Root Mean Square Error of Appropriation; AIC: Akaike Information Criterion;  
BIC: Bayesian Information Criterion; CFI: Comparative Fit Index; TLI: Tucker Lewis Index;  
SRMR: Standardized Root-Mean-Square Residual

## **Discussion**

The Head Start preschool program has historically been a program designed to be an inclusive, engaging two-generational approach to early education (McWayne et al., 2010). As Head Start becomes an increasingly diverse educational program, maintaining a culturally sensitive environment requires Head Start to establish open communication between schools and families. Assessing caregiver satisfaction in Head Start services provides an opportunity to engage caregivers in a two-way dialogue, increasing involvement and potentially shaping services.

Prior research on caregivers in Head Start has largely focused on caregiver involvement with minimal attention toward the related construct of caregiver satisfaction (Fantuzzo et al., 2006). In response to the need for accurate and organized assessment of satisfaction in Head Start families, Fantuzzo et al. (2006) created the PSEE to assess caregiver satisfaction in education specifically for Head Start families. Although the PSEE provided an opportunity for researchers and Head Start schools to assess caregiver satisfaction in Head Start families, the initial validation work done on the PSEE did not

include immigrant families or a sufficient number of Asian families, Latino families or male caregivers.

This paper provides a preliminary exploration of the PSEE across a male and female sample as well as U.S. born and non-U.S. born Head Start families. Results indicate there may be threats to the proposed three submeasure structure of the PSEE among U.S. born males. Results show Cronbach's alpha levels fall below strong score in the submeasure of satisfaction in classroom contact for the overall group of U.S.-born participants, for the overall group of male participants and for the small group of U.S.-born male participants. Item-rest correlations also show a significant variability between the U.S.-born group and the immigrant group, as well as showing significant variability between the male and female group. The failure to fit the proposed 3-factor solution to this diverse sample also suggests challenges to the submeasures assessing satisfaction with teacher, classroom, and schools embedded within the PSEE.

Although this is only an exploratory analysis, variations across the submeasure's Cronbach's alpha scores as well as variations in the item-rest correlations and the challenges in fitting a 3-factor solution within this sample provide reason to believe the PSEE may not maintain reliability and validity when used to measure three independent constructs related to satisfaction. Overall, the PSEE does appear to measure some concept(s) related to satisfaction, however, the three-factor model measuring teacher, classroom and school satisfaction does not appear to maintain reliability and validity in a cross-gender, cross-birthplace sample. Results suggest the PSEE is best suited to measure satisfaction as a unidimensional construct, as overall scores for the PSEE consistently indicated high levels of reliability.

Interestingly, the PSEE did maintain acceptable scores among foreign born groups. Despite evidence suggesting parent relations with their child's school may differ by nativity, this validation may suggest some similarity in measuring satisfaction across caregivers' birthplace (Campos, 2008; Lee, 2005; López, 2001; Tamis-Lemonda et al., 2009). Although certainly an area for further exploration, this may suggest the construct of satisfaction in Head Start could present a medium that transcends language and culture. If satisfaction in Head Start services proves to be predictive of involvement in services and is measurable across cultures with one, standardized tool, this construct could prove exceptionally valuable in increasing involvement in services in an ever-evolving population.

Historically, measuring satisfaction in education has not relied on validated, standardized tools of measurement. Satisfaction has been a concept often reported in the literature as a side note with no explanation for how the concept was measured (McNaughton, 1994). In the absence of a cross-culturally validated, standardized measure of satisfaction, the potential relationship between caregiver satisfaction and other, unidentified outcomes for children will go unexplored in diverse communities. With the recent push in Head Start to reach out to male caregivers in their community, the need to validate the PSEE and begin to understand its relation to involvement and other potential outcomes is even more urgent (Hall, 2008). Little can be known about the implications of caregiver satisfaction in education without properly validating a measure with a representative, diverse sample of families. The PSEE is a potentially valuable tool for creating bi-directional communication between families and the Head Start school system and warrants further exploration to strengthen its reliability and validity across cultures.



## **Limitations and Future Directions**

The limited sample size of this project lends to the need for future examination of the PSEE in a larger sample. The PSEE has taken great strides in measuring and valuing feedback from Head Start families however; the predominantly female, English only, predominantly Black and Caucasian sample used to validate the PSEE is not representative of the changing face of Head Start families. The limited sample of this analysis did not provide the opportunity to validate the PSEE in specific populations or specific languages. Further analysis should explore the more targeted validations of the PSEE in specific groups.

Psychometric work in the area of measure and defining satisfaction in education is an area of research that warrants attention. The measurement of satisfaction in education has thus far remained largely unstandardized and unreliable. Caregiver satisfaction in education remains an unexplored and poorly understood construct. In the absence of psychometric work to solidify the measurement of satisfaction in education, the importance of this topic remains largely unknown. Further exploration should examine the impact of satisfaction in Head Start services across varied language and cultural groups.

It should be noted that this exploratory analysis was conducted on a small sample. In particular, the sample that displayed the lowest reliability scores, U.S. born men, is a very small sample of 11 participants. This small sample cannot lead to any generalizable results about the use of the PSEE in U.S. born men. However, the concerning results of this analysis in this small sample of U.S. born men does highlight the need for further

exploration into the use of the PSEE in U.S. born men before the measure can be assumed to be valid and reliable in the population.

This exploration highlights the need to further explore the measurement of satisfaction in Head Start services for its potential use in increasing engagement in services. Although this is an exploratory study with a small sample, the PSEE shows great promise as a potential tool for measuring a unidimensional construct of satisfaction in Head Start services across diverse communities. This analysis shows discrepancies in the proposed three submeasures embedded in the PSEE, however, the unidimensional construct of satisfaction shows promise across diverse populations. Based in previous theory, this simple tool could be used efficiently and cost-effectively to increase engagement in Head Start services in diverse communities.

## References

- Aoki, K. (2008). Confucius vs. Socrates: The Impact of Educational Traditions of East and West in a Global Age. *International Journal of Learning*, 14(11).
- Arnold, D., Zeljo, A., Doctoroff, G., & Ortiz, C. (2008). Parent involvement in preschool: Predictors and the relation of involvement to preliteracy development. *School Psychology Review*, 37(1), 74-90.
- Arzubiaga, A. E., Nogueron, S. C., & Sullivan, A. L. (2009). The Education of Children in Im/migrant Families. *Review of Research in Education*, 33(1), 246–271.
- Aspiazu, G. G., Bauer S. C., & Spillett, M. D. (1998). Improving the academic performance of Hispanic youth: A community education Model, *Bilingual Research Journal*, 22(2-4), 127-147.
- Bailey, D. B. (1987). Collaborative goal-setting with families: Resolving differences in values and priorities for services. *Topics in Early Childhood Special Education*, 7(2), 59-71.
- Barnard, W. B. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review*, 26(1), 39-62.
- Bernheimer, L. P., Gallimore, R., & Weisner, T. S. (1990). Ecocultural theory as a context for the individual family service plan. *Journal of Early Intervention*, 14(3), 219-233.
- Campos, R. (2008). Considerations for studying father involvement in early childhood among Latino families. *Hispanic Journal of Behavioral Sciences*, 30(2), 133-160.
- Conn-Powers, M. C, Ross-Allen, J., Holburn, S. (1990). Transition of young children into the elementary education mainstream. *Topics in Early Childhood Special*

- Education, 9(4), 91-105.
- Epstein, J. L. (1987). Parent involvement: What research says to administrators. *Education and Urban Society*, 19(2), 119-136.
- Fantuzzo, J., Perry, M. A., & Childs, S. (2006). Parent satisfaction with educational experiences scale: A multivariate examination of parent satisfaction with early childhood education programs. *Early Childhood Research Quarterly*, 21(2), 142-152.
- Foner, N. (1997). The immigrant family: Cultural legacies and cultural changes. *International migration review*, 961-974.
- Guralnick, M.J. (1989). Recent developments in early intervention efficacy research: Implications for family involvement in P.L. 99-457. *Topics in Early Childhood Special Education*, 9(3), 1-17.
- Hall, R. L., & Schaverien, L. (2001). Families' engagement with young children's science and technology learning at home. *Science Education*, 85(4), 454-481.
- Hall, J. M. (2008). Reauthorizing Head Start father involvement. *Children and Families*, 12-14. Retrieved from [http://www.tapartnership.org/docs/callNotes/20110811\\_fatherhoodCallFatherInvolvement.pdf](http://www.tapartnership.org/docs/callNotes/20110811_fatherhoodCallFatherInvolvement.pdf)
- Hill, N. (2010). Culturally-Based Worldviews, Family processes, and family-school interactions. In S. L. Christenson & A. L. Reschly (Eds.), *The Handbook of family-school partnerships* (pp. 101-127). New York, NY: Routledge
- Ji, C. S., & Koblinsky, S. A. (2009). Parent involvement in children's education: An exploratory study of urban, Chinese immigrant families. *Urban Education*, 44(6), 687-709.

- Kohl, G., Lengua, L., & McMahon, R. (2000). Parent involvement in school conceptualizing multiple dimensions and their relations with family demographic risk factors. *Journal of School Psychology, 38*(6), 501-523.
- Laws, G., & Millward, L. (2001). Predicting parents' satisfaction with the education of their child with Down's syndrome. *Educational Research, 43*(2), 209-226.
- Leach, M. (2012) A burden of support? Household structure and economic resources among Mexican immigrant families. *Journal of Family Issues, 35*(1), 28-53
- Lee, S. (2005). Selective parent participation: Structural and cultural factors that influence school participation among Korean parents. *Equity & Excellence in Education, 38*(4), 299-308.
- López, G. R. (2001). The value of hard work: Lessons on parent involvement from an (im)migrant household. *Harvard Education Review, 71*(3), 416-438.
- Mcbride, B. A., Bae, J., & Wright, M. S. (2002). An examination of family-school partnership initiatives in rural prekindergarten programs. *Early Education and Development, 13*(1), 37-41.
- McNaughton, D. (1994). Measuring parent satisfaction with early childhood intervention programs: Current practice, problems, and future perspectives. *Topics in Early Childhood Special Education, 14*(1), 26-48.
- McWayne, C., Campos, R., & Owsianik, M. (2008). A multidimensional, multilevel examination of mother and father involvement among culturally diverse Head Start families. *Journal of School Psychology, 46*(5), 551-573.  
doi:10.1016/j.jsp.2008.06.001

- McWayne, C., Green, L. & Cheung, K. (2010). Head Start: A brief history of the largest federally-funded early childhood initiatives. In Clauss-Ehlers, C.S. (Ed). *Encyclopedia of Cross-Cultural School Psychology*. New York: Springer.
- McWayne, C. M., Melzi, G., Schick, A. R., Kennedy, J. L., & Mundt, K. (2013). Defining family engagement among Latino Head Start parents: A mixed-methods measurement development study. *Early Childhood Research Quarterly*, 28(3), 593–607. doi:10.1016/j.ecresq.2013.03.008
- Miedel, W., T. & Reynolds, A. J. (1999). Parent involvement in early intervention for disadvantaged children: Does it matter? *Journal of School Psychology*, 37(4), 379-402.
- Park, J., & Turnbull, A. P. (2001). Cross-cultural competency and special education: Perceptions and experiences of Korean parents of children with special needs. *Education and Training in Mental Retardation and Developmental Disabilities*, 36(2), 133–147.
- Rao, S. S. (2000). Perspectives of an African American mother on parent-professional relationships in special education. *Mental Retardation*, 38(6), 475–488.
- Reid, M. J., Webster-Stratton, C., & Beauchaine, T. P. (2001). Parent training in Head Start: A comparison of program response among African American, Asian American, Caucasian, and Hispanic mothers. *Prevention Science*, 2(4), 209–227.
- Reynolds, A. J., Temple, J. A., White, B. A. B., Ou S., Robertson, D. L. (2011) Age 26 cost-benefit analysis of the Child-Parent Center Early Education Program. *Child Development*, 82(1) 379-404.
- Scheirer, M. (1978). Program participants' positive perceptions: Psychological conflict of interest in social program evaluation. *Evaluation Quarterly*, 2, 53-70. Schwartz,

- Schwartz, I. S. & Baer, D. M. (1991). Social validity assessments: Is current practice state of the art? *Journal of Applied Behavior Analysis*, 2(2), 189–204.
- Schweinhart, L. J., Barnes, H. V., & Weikart, D. P. (1993). *Significant Benefits: The High/Scope Perry Preschool Study Through Age 27*. (Monographs of the High/Scope Educational Research Foundation, 10). Ypsilanti, MI: High/Scope Press.
- Soodak, L., & Erwin, E. J. (2000). Valued member or tolerated participant: Parents' experiences in inclusive early childhood settings. *Research and Practice for Persons with Severe Disabilities*, 25(1), 29–41. doi:10.2511/rpsd.25.1.29
- Summers, J. A., Hoffman, L., Marquis, J., Turnbull, A., & Poston, D. (2005). Relationship between parent satisfaction regarding partnerships with professionals and age of child. *Topics in Early Childhood Special Education*, 25(1), 48–58.
- Sumsion, J., & Goodfellow, J. (2006). Parents as consumers of early childhood education and care: The feasibility of demand-led improvements to quality. In D. King & G. Meagher (Eds.), *Paid care in Australia: Politics, profits, practices* (pp. 167–202). Australia: Sydney University Press.
- Tamis-LeMonda, C., Kahana-Kalman, R., & Yoshikawa, H. (2009). Father involvement in immigrant and ethnically diverse families from prenatal period to the second year: Prediction and mediating mechanisms. *Sex Roles*, 60(7-8), 496-509.
- Tran, T. V. (2009). *Developing cross-cultural measurement*. New York, NY: Oxford University Press.
- Upshur, C. C. (1991). Mothers' and fathers' ratings of the benefits of early intervention services. *Journal of Early Intervention*, 15, 345-357.

U.S. Census, (2013, June 13). Asians fastest-growing race or ethnic group in 2012, Census Bureau Reports. *Census Bureau Reports*. Retrieved from <http://www.census.gov/newsroom/press-releases/2013/cb13-112.html>

Waanders, C., Mendez, J. L., & Downer, J. T. (2007). Parent characteristics, economic stress and neighborhood context as predictors of parent involvement in preschool children's education. *Journal of School Psychology, 45*(6), 619-636.

Wolery, M. (1987). Program evaluation at the local level: Recommendations for improving services. *Topics in Early Childhood Special Education, 7*(2), 111- 123



**Predictors of Involvement in Head Start Services**  
**Among Diverse Immigrant Families**

## Abstract

**Background:** Nearly 86% of Head Start preschools serve non-English speaking families. The Head Start preschool program has been shown to increase academic proficiencies in children entering kindergarten and has been particularly successful in helping immigrant children entering the U.S. education system. Family involvement in their child's education as early as preschool has been correlated with positive academic and behavioral outcomes throughout childhood. Given the importance of Head Start services for immigrant families, this study seeks to better understand variables associated with involvement in Head Start among immigrant families.

**Methods:** This study collected data from a diverse sample of immigrant and U.S. born families to better understand what factors influence a family member's level of involvement in their Head Start program (n = 196). Participating parents and caregivers were from 17 different countries and completed surveys regarding a variety of demographic information, caregiver's level of satisfaction in Head Start services, and caregiver's level of involvement in Head Start services.

**Results:** Results indicate a family's language and birthplace have no significant relationship with a family's level of involvement in their child's education. Rather, a family's satisfaction in the services provided by the school shows the strongest associations with a family's involvement in services. Demographic variables associated with involvement in a child's education include a caregiver's level of education and a caregiver's relation to the child.

**Implications:** Findings indicate that caregivers with low educational attainment and in non-traditional families may be in need of targeted intervention focused on increasing levels of satisfaction in services. Satisfaction in services may be an important factor in increasing family involvement in Head Start services independent of caregivers' demographic characteristics. Intervention programs aimed at evaluating and improving the perceived quality of Head Start services may be a valuable tool towards increasing involvement in services.

## **Introduction**

Involvement in a child's education, as early as preschool, has shown to produce positive gains for children throughout their schooling and into adulthood (Arnold, Zeljo, Doctoroff & Ortiz, 2008; Barnard, 2004; Epstein, 1983). These positive gains are even more pronounced in immigrant families with foreign or U.S. born children (Lahaie, 2008). In low-income families, encouraging family involvement in education is often at odds with busy schedules that may include multiple jobs and meetings with social service providers. Low-income immigrant families may face additional barriers to involvement including cultural conflicts and language barriers (Arzubiaga, Nogueron, & Sullivan, 2009; Dyson, 2001; Golden, 2011). In an effort to encourage family involvement in Head Start services among diverse immigrant families, this study begins with an exploration into variables associated with involvement.

Underscoring this line of research is the pivotal role of family involvement in Head Start services. Head Start preschools provide a two-generation approach to education that necessitates a high level of involvement on behalf of families (Zigler & Styfco, 2004). Families with children enrolled in Head Start typically work with a social worker at the Head Start preschool which children receive health and education services. This model of early childhood education allows Head Start to work effectively with high-risk families and provides a more holistic educational experience for children. However, this model of education can only be effective when families are highly involved. Head Start has been shown to produce academic gains in children before they enter the K-12 education system (Abbott-Shim, Lambert, & McCarty, 2003). Those benefits appear to be significantly more pronounced in English language learner families (Lahaie, 2008).

## **Family Involvement in Education**

Family involvement in a child's education has shown to be correlated with a number of desirable outcomes for children. Parent involvement in early education at any stage is correlated with decreased rates of drop out for students (Barnard, 2004; Rumberger, 1995), increased preliteracy skills (Arnold et al, 2008), and increased in math abilities (Hill, & Craft, 2003). Parent involvement in early education also shows behavioral benefits through improvements in social competence (Parker, Boak, Griffin, Ripple, & Peay, 1999), and overall increases in school readiness by the time children enter kindergarten (McWayne, Hahs-Vaughn, Cheung, & Wright, 2012).

For low-income youth, the impact of parent involvement in education shows promise for mitigating the risk of some negative outcomes and aiding in closing the achievement gap (Jeynes, 2005). Recent research has found parent involvement for inner city at-risk youth correlated with higher rates of high school completion (Luster, & McAdoo, 1996). Currently, many inner city schools struggle with drop out rates that can crest over 40%, and among racial minority students, those born outside the U.S. are often at higher risk of dropping out (Kena et al, 2016). Many of the barriers to high school graduation facing at-risk youth are persistent and difficult to change. Parent involvement in education provides a more alterable path to increase positive outcomes for youth.

## **Immigrant Families in U.S. Education**

Evaluating parent involvement in education among ethnically diverse families has produces conflicting results. Overall, some studies have suggested immigrant families are less involved in their child's education than non-immigrant families for a variety of reason, often citing cultural difference between immigrant families and the mainstream

culture of the school or language gaps between immigrant families and school personnel as a primary reason (Garcia Coll, et al, 2002; Turney & Kao, 2009). Alternatively, other studies have suggested immigrant family involvement in their child's education takes on forms of involvement that are not typically captured in current measurement tools. For example, Suárez-Orozco and Suárez-Orozco (2001) suggested many immigrant families place a stronger emphasis on the value of education than their U.S. -born peers through talking about the importance of education rather than directly aiding in educational activities. This form of home-based involvement in education is often left out of measures of involvement in education but may produce some of the positive effects associated with family involvement in education.

Previous measures of involvement in education focused on unidimensional constructs that were centered on the idea that involvement only occurred in the physical schools. Operationalizing "involvement in education" often focused on actions such as attending parent-teacher meetings, or volunteering in the classroom. More contemporary understandings of involvement have encompassed a broader definition (Anderson, & Minke, 2015; Fantuzzo, Tighe, & Childs, 2000). Current literature generally focuses on involvement in the school such as volunteering in the classroom, home-based involvement such as homework help, and communication between schools and families such as regular conversations between teachers and parents (Fantuzzo, et al, 2000; McWayne, Melzi, Schick, Kennedy, & Mundt, 2013). In more recent research on family involvement in education, immigrant and ethnic minority families have shown a tendency to be involved in their children's education in different ways than their U.S. born counterparts (McWayne, Melzi, Schick, Kennedy, & Mundt, 2013; Suárez-Orozco, &

Suárez-Orozco, 2001). Immigrant families have been shown to place more emphasis on the importance of education to achieve stability and opportunity (Lopez, 2001), and may hold different perspectives on parents' role in the classroom (Garcia Coll, et al, 2002)

### **Predictors of Family Involvement**

Examining immigrant family involvement in education is an almost inherently challenging question given the exceptional number of confounding variables. Variables such as the family's immigration story, socio-economic status, neighborhood, and social supports weigh heavily on a family's level of involvement in education (Garcia Coll, et al, 2002; Lopez, 2001). Much of the current literature examining family involvement in education among diverse communities fails to control for the inextricable relationship between immigration, ethnicity, and socioeconomic factors (Hill & Craft, 2003). Rather, much research has been done examining how language and cultural barriers impact a family's, or specifically parent's, level of involvement in their child's education (Garcia Coll, et al, 2002; McWayne, Melzi, Schick, Kennedy, & Mundt, 2013; Suárez-Orozco, & Suárez-Orozco, 2001).

Focus has been paid toward demographic variables as they relate to a family's level of involvement in their child's education. A list of factors have historically been associated with lower levels of involvement in a child's education including but not limited to: single parent status (Kohl, Lengua, & McMahon, 2000), low-income parents (Waanders, Mendez, & Downer, 2007), non-English speaking parents (Garcia Coll et al, 2002), parents with lower educational attainment (Kohl, Lengua, & McMahon, 2000), and parents gender (McWayne, Campos, & Owsianik, 2008). Beyond individual level demographics, recent research has begun to examine environmental factors associated

with family involvement in education. This recent body of literature has suggested factors such as the availability of resources, disorder within the neighborhood, the mobility of residents within the community, and population density are associated with levels of family involvement (Waanders, Mendez, & Downer, 2007). It is worth noting the confounding impact of socioeconomic status on many environmental factors and the potential challenges in establishing which variable is, in fact, related to family involvement in education.

### **Family involvement in Head Start**

Any examination of immigrant family involvement in Head Start must make an effort to avoid the mistakes of overgeneralization. Equating racial, ethnic, country, or language markers with immutable traits in children and families promotes an overly simplistic view of various populations (Gutiérrez, & Rogoff, 2003). This is not to say that commonalities within cultural groups are to be ignored or overlooked, rather, this is to allow for flexibility in the understanding of the literature around working with diverse communities. Furthermore, when examining minority and oppressed communities, research must allow for a historical context to promote a contextual understanding of how marginalized groups interact with government institutions.

Immigrant family involvement in Head Start specifically has received little attention in the literature. Research that has been published on immigrant family involvement in Head Start services has focused on one immigrant group at a time, often highlighting the unique needs of unique immigrant groups. For example, McWayne et al (2013) examined family involvement in Head Start services among Latino families, highlighting that many Latino families conceptualize education as a broader, more

encompassing idea. Thus, McWayne et al (2013) argue that involvement in education services among Latino families must encompass more life skills and community-based activities. Although specific immigrant community examinations like this are valuable, most Head Start preschools serve multiple immigrant groups in the same classroom. Applied research must examine how Head Start preschools can engage diverse immigrant communities simultaneously.

Head Start officials have noted their struggles in engaging immigrant families in services (Matthews & Ewan, 2006). As this population grows, immigrant children and the children of immigrants often face additional challenges to school readiness before entering the K-12 education system. Language and cultural barriers, in addition to parents that are more likely to have lower educational attainment themselves puts higher barriers in front of children in immigrant families (Child Trend, 2014). Families immigrating from around the world come into the U.S. with a variety of experiences from their home country and their home country's education system. Globalization and global capitalism have created vastly unequal opportunities for high quality formal education in developing nations (Yang, 2003), a factor which often pushes families to consider migrating into more developed countries. This also creates challenges for families seeking to enter their children into the U.S. education system. Head Start has been shown ease some of those struggles through significant gains in school readiness for children in immigrant families before entering the K-12 education system (Lahaie, 2008).

Beyond school readiness, family involvement in Head Start services also provides social serves for parents and caregivers. Immigrant families in Head Start are, by definition, low-income families and often present a number of social services needs. Over



a quarter of immigrant families in the United States fall below the poverty line and qualify for Head Start services (Child Trends, 2014). However, enrollment and engagement in Head Start services among immigrant families remains proportionately below that of U.S. born families. Specifically, only 5% of immigrant children under age 3 are enrolled in any center-based childcare, such as Head Start, versus 35% of U.S. born children under age 3. Among immigrant children with both parents working full time, immigrant children are half as likely to be enrolled in center-based care, such as Head Start, compared to their U.S. born counterparts (11% enrollment versus 23% enrollment respectively) (Matthews & Ewan, 2006).

Examining how and why immigrant families are engaged in Head Start services remains challenging because Head Start does not routinely gather immigration data such as immigration status or country of origin on families when they enroll in the program. Head Start services are available to undocumented families, families in the U.S. on a visa or green card, and naturalized citizens. However, in the absence of enrollment data on immigration status, explorations into immigrant in Head Start are limited.

## **Methodology**

### **Procedures**

Data were gathered from two Head Start preschools located roughly one mile apart, serving the same immigrant community. This study used a community based participatory process and data collection was done under the advice of the Head Start preschool staff and families. Prior to any data collection, the lead researcher met with the Head Start staff and Parent Advisory Committee. Every Head Start has, to some extent, a Parent Advisory Committee that is composed of parents of children enrolled in the

school. The Committee advises the school on everything from curriculum development to the hiring and firing of staff. Through working with the Head Start staff and parents, the data collection procedures were developed. Parents and staff that assisted in the development of the study did so at their own discretion and were not compensated for their time.

Participants were recruited in two waves. The first wave took place at one of the two Head Start preschools in the spring of 2013. Participants were asked to complete a small survey packet while dropping their children off or picking their children up from preschool. In total, 144 people participated in the first round of data collection.

The second wave of data collection was collected from a second Head Start preschool located in the same neighborhood. This smaller round of data collection took place in the fall of 2014 and yielded 52 participants. Similar to the first round of data collection, participants were offered the opportunity to complete a survey when they picked up or dropped off their children at Head Start. Participants at both schools were offered a \$10 gift card to thank them for their time.

Surveys were distributed in five languages to accommodate participants with limited English proficiency. Of the five languages, English was requested 84% of the time, Spanish was requested 8%, Haitian Creole was requested 4%, Vietnamese was requested 2%, and Cape Verdean Creole was requested 1%. All data collection procedure were approved by the Boston College Institutional Review Board and all participants consented to partake in this study.

## **Participants**

Head Start policies have pushed for an increasing role of parents in their child's schooling and are now taking a more inclusive stance toward family involvement, rather than just parent involvement. Acknowledging that many non-traditional families have aunts, uncles, grandparents, and siblings raising children, parent involvement in education has been replaced by family involvement in education (Hernandez, 2004). Of particular importance in low-income and immigrant families, this provides a more inclusive idea of who plays a parental role in a child's life and captures data from non-traditional families. In the current study, selection criteria for parents/caregivers was left relatively open to allow for non-traditional family structures. Any adult that regularly provides care for a Head Start student was welcomed to participate in the study.

### **Measurement**

Quantitative data collection was based on two surveys designed specifically for use in Head Start preschools. Due to the unique model of Head Start schooling, a small number of measurement tools have been designed specifically for use in Head Start preschools. The Head Start model of education combines social services with traditional preschool education, creating a program that blends services for families, health screenings for children, and preschool education for children. The enhanced services provided by Head Start, that are not typically a part of preschool education program in the U.S., necessitates measurement tools designed for the Head Start program.

The Family Involvement Questionnaire (FIQ) (Fantuzzo et al., 2000) is a multidimensional measure of parent involvement in children's early education and was used in this study to capture the variable of family involvement. This 42-item questionnaire evaluates parent involvement in their child's education based around three

facets of involvement: school-based, home-based, and collaboration between home and school. All questions are reported on a 4-point Likert-type scale and a sum score is used to calculate the results. The FIQ has been validated in U.S. born, English speaking families as well as foreign born, Spanish speaking families. In both populations, the FIQ maintained a three factor structure and Cronbach's Alpha scores above .80 (Fantuzzo et al., 2000, Roberts & Ginsburg-Block, 2005).

The Parent Satisfaction with Educational Experiences Scale (PSEE) (Fantuzzo, et al, 2006) is a 12-item self-report measure of caregiver satisfaction with their child's early childhood education program and was used in this study to measure the caregiver's levels of satisfaction in their Head Start program. This measure asks parents to report their level of satisfaction on a Likert-type scale to assess their satisfaction in three areas of their child's education (their child's teacher, their child's classroom and their child's overall school). All questions are reported on a 4-point Likert-type scale and a sum score is used to calculate the results. The PSEE has not been widely explored for validity among diverse immigrant families. In the earliest stage of this ongoing community based participatory partnership with Head Start, the PSEE was validated for use with this dataset. Previous validation showed a Cronbach's Alpha=.916 among families born in the U.S. and Cronbach's Alpha =.913 among families born outside of the U.S. (Day Leong, 2015).

## **Sample**

The combined data from both schools yielded a sample of 196 people, from 17 different countries. The resulting sample was nearly 84% parents, 9% aunts and uncles, 5% grandparent and 2% other. The sample was divided nearly evenly between US born

participants and participants born outside the U.S. with 49% of the sample was born outside of the U.S.; 77% of the sample was female.

The sample of caregivers were predominantly Black women, 76.5% of the sample self-identified as women and 66% self-identified as Black. Of the caregivers that identified as being born outside of the U.S., the largest immigrant groups in the sample were from Haiti (17.8%), the Dominican Republic (6.1%), and Cape Verde (5.6%). Education levels among caregivers ranged from no formal education (1%) to a graduate degree (4.5%), the majority of caregivers had completed high school but had not completed college (28.1%). In addition, 36.2% of caregivers report they are unmarried and not in a committed relationship, and 25.5% report they are married. The majority of parents report having additional help with their child, 67.4% of parent report an additional adult helps to care for their child such as a family member or friend.

### **Analysis**

Statistical analysis was completed using Stata 12. In all analytic models, respondents with missing data were dropped resulting in varying sample sizes but complete data sets without imputation. Analysis began with an examination of the relationship between three submeasures of satisfaction and three submeasures of involvement. Embedded in the measurement tools on satisfaction and involvement were submeasures of each construct. Satisfaction was broken into satisfaction in the classroom environment, satisfaction in the child's teacher, and satisfaction in the overall school focusing on the school administration. Involvement was broken into three submeasures focused on involvement in the school itself (such as volunteering in the classroom), involvement at home (such as homework help), and home-school conferencing (such as

open communication with the teacher). Each submeasure correlated so highly with the overall constructs, the overlap suggested a more simplified analysis was warranted. Submeasures of involvement each correlated with the overall construct of “involvement” at a  $r=0.79$ ,  $p<0.001$  level or higher. Similarly, each submeasure of satisfaction correlated with the overall construct of “satisfaction” at a  $r=0.82$ ,  $p<0.001$  level or above. Similarly, submeasures of involvement showed high levels of correlation with one another and each submeasure of involvement highly correlated with one another. Given the overlap between each submeasure, submeasures were removed from later analysis and the constructs were collapsed into two measures of overall satisfaction and overall involvement.

Measuring satisfaction and involvement as two separate variables creates a possibility that the two variables may overlap or even serve as a proxy for one another. The relationship between the two constructs is complicated. Logically, there could be a reciprocal relationship between satisfaction and involvement in which the two variables are so intertwined extrapolating one from the other would be nearly impossible. For the purposes of analysis, to examine the potential the satisfaction may, in fact, be a proxy for involvement demographic variables were also examined in a bivariate associations with satisfaction. Results indicate there is minimal overlap between the two variables and the demographic variables. For example, a caregiver’s relationship with a child showed a statistically significant relationship with a caregiver’s level of involvement ( $r=2.65$ ,  $p<0.01$ ) in a child’s education but no significant relationship with a caregiver’s level of satisfaction in a child’s education. This difference suggests that satisfaction and involvement are, indeed, separate constructs.

## Results

With the collapsed satisfaction and involvement scores, multiple regression analysis sought to establish what, if any, variables predicted higher levels of involvement in a child's education. Bivariate regressions dropped any participants that had pertinent missing data, for example any participant that did not answer questions related to involvement were not included in bivariate models related to involvement thus resulting in slight variations in the sample size for each model. After an unadjusted bivariate regression analysis, results demonstrated the importance of satisfaction in services, as satisfaction in services increases by one unit; involvement in services increases by over 6 units ( $\beta = 6.69$ ,  $p < 0.001$ ). Additionally, a caregiver's level of education showed a significant relationship with involvement. Caregivers that had a high school degree were less involved than the baseline group, caregivers that had at least a college degree ( $\beta = -1.27$ ,  $p < 0.001$ ). Similarly, caregivers that had not completed high school were less involved than caregivers that had at least a college degree ( $\beta = -1.91$ ,  $p < 0.001$ ). A caregiver's relationship to the child also showed a significant relationship with involvement with caregivers, such that caregivers who were not parents show an over 2 unit decrease in levels of involvement when compared to the baseline group, parents ( $\beta = -2.65$ ,  $p < 0.001$ ).

**Table 1.** Unadjusted Bivariate Analysis of Demographics, Satisfaction and Involvement

	<b>n</b>	<b>Satisfaction Unadjusted Coeff (95% CI)</b>	<b>n</b>	<b>Involvement Unadjusted Coeff (95% CI)</b>
<b>Satisfaction</b>		-		6.69** (3.31-6.09)
<b>Language</b>	194		187	
English		-		-
Other		0.48 (-0.59-0.97)		0.72 (-5.43-11.64)
<b>Birthplace</b>	190		184	
United States		-		-
Other		-0.77 (-0.80-0.35)		0.78 (-3.74-8.65)
<b>Race</b>	180		174	
Black		-		-
White		-0.35 (-0.96-0.67)		0.63 (-6.04-11.73)
Other		1.01 (3.27-3.99)		0.57 (-5.60-10.16)
<b>Education</b>	187		180	
College or Above		-		-
High School Graduate		-1.43 (-1.21-0.19)		-1.27 (-12.39-2.67)
Some High School or Less		-1.15 (-1.10-0.29)		-1.91* (-14.89-0.25)
<b>Relation to Child</b>	190		183	
Parent		-		-
Other		-0.36 (-0.93-0.65)		-2.65** (-19.47- -2.86)

$p < 0.01 = **$

$p < 0.05 = *$

After establishing which variables that produced statistically significant associations with a caregiver's level of involvement in a child's early education, a multivariate analysis was completed to assess which variables show a stronger



relationship with involvement. Given the assumed importance of language and a caregiver's birthplace, variables assessing a language and birthplace were included in the multivariate analysis. Similar to the bivariate analysis, the multivariate model displayed the importance of satisfaction, caregiver's level of education, and caregiver's relationship to the child. In this analysis, the strongest predictor of involvement in education was the level of satisfaction in services provided by the school. As satisfaction in Head Start services increased one unit, involvement in Head Start services increased by over 4 units ( $\beta = 4.79$ ,  $p < 0.001$ ). The caregiver's relationship to the child also showed a significant association with the level of involvement in the child's education. Non-parental caregivers such as aunts, uncles, or grandparents showed 2.51 unit decrease in levels of involvement than the baseline group, parents ( $\beta = -2.51$ ,  $p < 0.001$ ). Caregiver's level of education also showed a significant association with levels of involvement in education, as education increased, levels of involvement increased. Caregivers with a high school degree were less involved in their child's education than the baseline group, caregivers with at least a college degree ( $\beta = -2.43$ ,  $p < 0.001$ ) and caregivers that had not graduated high school were also less involved in their child's education than caregivers with a college degree ( $\beta = -2.50$ ,  $p < 0.001$ ). As seen in Table 2, mean scores show caregivers with lower levels of education attainment and non-parent caregivers have lower levels of involvement in their child's Head Start program. Mean scores represent two very different scales, involvement in Head Start is measured on a scale from 35-140, while satisfaction in Head Start services is measured on a scale from 0-6. Standardized coefficients are used to allow for a comparison of such different scales.

**Table 2.** Multivariate Analysis of Demographics, Satisfaction, and Involvement

	Mean Involvement	Standardized Adjusted Coeff (95% CI)	Mean Satisfaction	Standardized Adjusted Coeff (95% CI)
<b>n</b>	173		179	
<b>Satisfaction</b>	-	4.79** (2.21-5.32)	-	-
<b>Language</b>				
English	92.1	-	3.6	-
Other	95.2	0.03 (-10.1- 13.4)	3.8	0.49 (-0.9-1.4)
<b>Birthplace</b>				
United States	91.2	-	3.8	-
Other	93.7	0.29 (-6.7-8.9)	3.6	0.44 (-0.9-0.6)
<b>Education</b>				
College or Above	95.6	-	3.9	-
High School Graduate	90.7	-2.43** (-17.8- -1.8)	3.4	-1.85* (-1.5-0.05)
Some High School or Less	88.3	-2.50** (-19.1- -2.2)	3.5	-1.36 (-1.4-0.3)
<b>Relation to Child</b>				
Parent	94.8	-	3.8	-
Other	83.6	-2.51** (-20.6- -2.5)	3.6	0.49 (-1.1-0.7)

Satisfaction Range: 0-6

Involvement Range: 35-140

 $p < 0.01 = **$  $p < 0.05 = *$

## **Discussion**

The need to fully understand caregiver involvement in education stems from the important role involvement may play in a child's education success. Caregiver involvement in education has been linked to positive academic and behavioral outcomes in children (Arnold, Zeljo, Doctoroff & Ortiz, 2008; Barnard, 2004; Epstein, 1983), these positive gains appear to be even more pronounced in immigrant youth (Lahaie, 2008). However, even less is understood about how and why immigrant families are involved in their child's education. Research on immigrant family involvement in education has shown mixed results suggesting families may be involved in their child's education in differing ways and at differing levels than U.S. born families (Garcia Coll, et al, 2002; Suárez-Orozco & Suárez-Orozco, 2001; Turney & Kao, 2009).

This study sought to understand if a caregiver's birthplace or language predicted their level of involvement in their child's education, or if any different variables showed associations with their level of involvement. Through initial bivariate analysis, this study found satisfaction, a caregiver's level of education, and a caregiver's relation to the child to have statistically significant relations with involvement in education. Converse to previous research (see e.g. Garcia Coll, et al, 2002; Turney & Kao, 2009), the study suggested that birthplace and language were not related to a caregiver's level of involvement in their child's education. Multivariate analysis were employed to examine which variables produced the strongest relationship with a caregiver's level of involvement in their child's education. A caregiver's level of satisfaction in services showed the strongest association with a caregiver's level of involvement. Other related

variables including a caregiver's level of education and a caregiver's relation to their child maintained significant, albeit weaker associations in a multivariate model.

Interestingly, contrary to previous research (see e.g. Garcia Coll, et al, 2002; Turney & Kao, 2009), results did not indicate a statistically significant relationship between any variable related to immigration status and levels of involvement in a child's education. Language, or a caregiver's place of birth showed no statistically significant relation to the level of involvement in education. Results suggest that immigrant family involvement in their child's early education may not differ from U.S. born family involvement in early childhood education. Previous research has suggested that immigrant families differ in their relationship with their child's schooling (Suárez-Orozco & Suárez-Orozco, 2001). Results from this study do not support findings of differences between immigrant and US born families in predictors of involvement in education.

The importance of satisfaction in services also provides an opportunity to engage in two-way dialogue with families to improve education services in an effort to increase involvement in a child's education. Evaluating family satisfaction in a school provides education service providers with a clear idea of where improvements can be made and may even provide a road map for improving education policy. Previous research on immigrant families in Head Start has largely focused on highlighting the unique needs of each immigrant group (see e.g. Garcia Coll, et al, 2002; Suárez-Orozco & Suárez-Orozco, 2001; Turney & Kao, 2009). Although this research has provided valuable information, the majority of Head Start preschools serve multiple immigrant communities alongside U.S. born communities- often in one classroom. This study seeks to find applied tools that can be used to work with diverse Head Start communities.

The applied nature of this work provides implications for policy and practice with immigrant communities. Satisfaction in services may be a construct universally related to involvement in services at Head Start. The universal nature of this relationship provides a simple, clear tool for Head Start programs in their efforts to work with increasingly diverse immigrant communities. Simply collecting data on levels of satisfaction in services among parents and caregivers provides valuable information to Head Start policymakers. Furthermore, efforts should be made to explore intervention programming based on improving levels of satisfaction in services among parents and caregivers.

### **Limitations and Future Directions**

The limited sample size of this study combined with the diversity of the immigrant groups in the study did not allow for an in depth analysis of each immigrant group. Undeniably, each immigrant group, even each individual immigrant, enters the U.S. education system with a unique understanding of a family's role in their child's education. Gaining a better understanding on how to improve levels of involvement in individual immigrant groups would warrant an in depth examination of one group at a time. Previous research has suggested that immigrant groups enter the U.S. education system with a framework based on their own previous experiences with education systems in their home country. If this framework for understanding is incongruent with the U.S. education system, research has suggested that that conflict can influence levels of involvement in education (Garcia Coll, et al, 2002; Turney & Kao, 2009)

Further analysis is also needed when examining abstract constructs such as satisfaction in services. Satisfaction is a challenging construct to define and measure. Correlation analysis suggests satisfaction is a separate but highly related construct to

involvement. Qualitative research is necessary to fully understand how satisfaction in services influences or is influenced by involvement in services.

### **Implications**

This research represented the beginning of a line of research into tools that can be used to increase engagement in Head Start services among diverse immigrant families. Immigration in the United States encompasses a varied, multi-lingual, multi-cultural group. Efforts to provide Head Start teachers and staff with tools to work with increasingly disparate immigrant communities must reflect the reality in many classrooms. This exploration suggests that responsively evaluating satisfaction in services may be an effective tool for increasing engagement in Head Start services among immigrant communities.

## References

- Abbott-Shim, M., Lambert, R., & McCarty, F. (2003). A comparison of school readiness outcomes for children randomly assigned to a Head Start program and the program's wait list. *Journal of Education for Students Placed at Risk*, 8(2), 191-214.
- Anderson, K. J., & Minke, K. M. (2015). Toward Involvement an in Education : of Understanding Decision Making Parents '. *The Journal of Educational Research*, 100(5), 311–323.
- Arnold, D. H., Zeljo, A., Doctoroff, G. L., & Ortiz, C. (2008). Parent Involvement in Preschool: Predictors and the Relation of Involvement to Preliteracy Development. *School Psychology Review*, 37(1), 74–90.
- Arzubiaga, A. E., Nogueron, S. C., & Sullivan, A. L. (2009). The Education of Children in Im/migrant Families. *Review of Research in Education*, 33(1), 246–271.
- Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review*, 26(1), 39–62.
- Child Trends. (2014). *Immigrant children*. Available at: <https://www.childtrends.org/?indicators=immigrant-children>
- Day Leong, A. (2015) Assessing the Cross-Cultural Reliability and Validity of a Measure of Parent Satisfaction Among Head Start Caregivers. *Journal of Family Strengths*. 14 (1), 1-18
- Dyson, L. (2001). Home-School Communication and Expectations of Recent Chinese Immigrants. *Canadian Journal of Education*, 26(4), 455–476.
- Epstein, J. L. (1983). Longitudinal effects of family-school-person interactions on student outcomes. In A. Kerckhoff (Ed.), *Research in sociology of education and socialization* (Vol. 4, pp. 101-128). Greenwich, CT

- Fantuzzo, J., Tighe, E., & Childs, S. (2000). Family Involvement Questionnaire: A multivariate assessment of family participation in early childhood education. *Journal of Educational Psychology*, 92(2), 367.
- Garcia Coll, C., Akiba, D., Palacios, N., Bailey, B., Silver, R., DiMartino, L., & Chin, C. (2002). Parental Involvement in Children's Education: Lessons from Three Immigrant Groups. *Parenting: Science and Practice*, 2(3), 303–324.
- Golden, O. (2011). DIALOG Raising Citizens : Head Start and the Changing Demographics of Today's Young Children, 14(1), 2–5.
- Hernandez, D. J. (2004). Demographic change and the life circumstances of immigrant families. *The future of children*, 17-47.
- Hill, N. E., & Craft, S. A. (2003). Parent-school involvement and school performance: Mediated pathways among socioeconomically comparable African American and Euro-American families. *Journal of Educational Psychology; Journal of Educational Psychology*, 95(1), 74.
- Jeynes, W. H. (2005). A Meta-Analysis of the Relation of Parental Involvement to Urban Elementary School Student Academic Achievement. *Urban Education*, 40(3), 237–269.
- Kena, G., Hussar W., McFarland J., de Brey C., Musu-Gillette, L., Wang, X., Zhang, J., Rathbun, A., Wilkinson-Flicker, S., Diliberti M., Barner, A., Bullock Mann, F., and Dunlop Velez, E. (2016). The Condition of Education 2016, U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved from <http://nces.ed.gov/pubsearch>.
- Kohl, G., Lengua, L., & McMahon, R. (2000). Parent involvement in school conceptualizing multiple dimensions and their relations with family demographic risk factors. *Journal of School Psychology*, 38(6), 501-523.



- Lahaie, C. (2008). School Readiness of Children of Immigrants: Does Parental Involvement Play a Role? *Social Science Quarterly*, 89(3), 684–705.
- Lopez, G. R. (2001). The value of hard work : Lessons on parent involvement from an (im)migrant household. *Harvard Educational Review*, 71(3), 416–437.
- Luster, T., & McAdoo, H. (1996). Family and child influences on educational attainment: A secondary analysis of the high/scope Perry Preschool data. *Developmental Psychology*, 32(1), 26–39.
- Matthews, H., & Ewen, D. (2006). *Reaching All Children? Understanding Early Care and Education Participation Among Immigrant Families*.
- McWayne, C., Campos, R., & Owsianik, M. (2008). A multidimensional, multilevel examination of mother and father involvement among culturally diverse Head Start families. *Journal of School Psychology*, 46(5), 551–73.
- McWayne, C. M., Hahs-Vaughn, D., Cheung, K., & Wright, L. G. (2012). National profiles of school readiness skills for Head Start children: An investigation of stability and change. *Early Childhood Research Quarterly*, 27, 668–683.
- McWayne, C. M., Melzi, G., Schick, A. R., Kennedy, J. L., & Mundt, K. (2013). Defining family engagement among Latino Head Start parents: A mixed-methods measurement development study. *Early Childhood Research Quarterly*, 28(3), 593–607.
- Parker, F. L., Boak, A. Y., Griffin, K. W., Ripple, C., & Peay, L. (1999). Parent-child relationship, home learning environment, and school readiness. *School Psychology Review*, 28 (3) 413-425
- Roberts, M., & Ginsburg-Block, M. (2005). Examining early childhood family-school

- collaboration practices among diverse Southwestern families. Symposium paper presented at the Annual Meeting of the National Association of School Psychologists, Atlanta, GA.
- Rumberger, R. W (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, 32, 583-625.
- Suárez-Orozco, C. & Suárez-Orozco, M. (2001) *Children of Immigration*. The United States of America, President and Fellows of Harvard College
- Turney, K., & Kao, G. (2009). Barriers to School Involvement: Are Immigrant Parents Disadvantaged? *The Journal of Educational Research*, 102(4), 257–271.
- Waanders, C., Mendez, J. L., & Downer, J. T. (2007). Parent characteristics, economic stress and neighborhood context as predictors of parent involvement in preschool children's education. *Journal of School Psychology*, 45(6), 619–636.
- Yang, R. (2003). Globalization and higher education development: A critical analysis. *International Review of Education*, 49(3), 269-291.
- Zigler, E. & Styfco, S. (eds) (2004) *The Head Start Debates*. Baltimore, MD. Paul H Brookes Publishing

**Immigrant Parent Involvement in Head Start Services:  
An examination of FACES data**

## **Abstract**

**Background:** Head Start is a federally funded early childhood education program that takes a unique 2-generation approach to working with families. Family engagement in early education like Head Start has been shown to improve academic and behavioral outcomes in children and shows particularly beneficial effects in the children of immigrant parents. This study seeks to explore predictors of involvement in Head Start services among immigrant families.

**Methodology:** Through an examination of FACES 2009 data, this study uses bivariate and multivariate regression analysis to determine variables predict involvement in Head Start services. Analysis examined a number of demographic variables and levels of satisfaction in services as they relate to involvement in Head Start services. Further analysis examines mediating and moderating effects through a KHB analysis and an interaction analysis.

**Results:** Results indicate immigrant and U.S. born parents do not differ in their levels of involvement in Head Start services. Rather, for both groups of parents, parental education attainment and satisfaction in services predict levels of involvement. Furthermore, for mothers, the relationship between levels of educational attainment and involvement is fully mediated by mothers' levels of employment.

**Implications:** Results suggest that immigrant families may not need to be singled out in efforts to promote involvement in Head Start services. Rather, efforts to improve involvement in Head Start services should consider parents' levels of education, maternal employment status, and parents' levels of satisfaction in Head Start services.

## **Introduction**

The Head Start program is a federally funded early childhood education program that mixes social services for families with preschool education for children. The program was founded in 1965 as a part of President Lyndon B Johnson's Great Society campaign. After 50 years of evolution, Head Start has grown from an 8-week summer program to a nation wide program with a \$9.6 billion budget in 2017 (Zigler & Styfco, 2004).

A cornerstone of the Head Start program is the successful engagement of families in Head Start services. Head Start's unique 2-generation approach to early education seeks to work with parents and children. Engaging families in Head Start services at the earliest point in a child's education not only provides the families with a model for how to engage in their child's education but also provides effective social services to allow the family to resolve challenges in the home. Often, the public K-12 education system provides significantly fewer social services than Head Start is able to provide; by engaging families in Head Start social services before entering the K-12 education system, families are able to connect social service outside of the school to provide assistance where it is needed.

Current literature around immigrant families in the US education system paints a portrait of immigrant families struggling to engage in education services. Immigrant families that struggle with language and cultural differences between staff/teachers and families have reported feeling uncomfortable and unsure of themselves in public school environments in the US (Ji, & Koblinsky, 2009; Lamb-Parker et al., 1996; Moles, 1993; Ramirez, 2003). If Head Start is to successfully engage these diverse immigrant

communities, they must begin with a thoughtful examination of how and why these families become engaged in services.

Past thinking around family involvement in education focused on family involvement in school-based activities such as parent-teacher meetings or volunteering in the classrooms (Fantuzzo Tighe & Childs, 2000). By emphasizing only forms of family involvement that took place in the school, this unidimensional understanding of family involvement often portrayed low-income families as highly uninvolved in their children's education (Arnold Zeljo, Doctoroff & Ortiz, 2008). Many low-income, hourly wage parents struggle to manage work schedules and in-school activities such as parent-teacher meetings or classroom volunteering, leaving many to appear uninvolved. Currently, family involvement is conceptualized as both activities that take place in the school and activities that take place the home to promote learning and connect the home and school environment (Fantuzzo et al, 2000). This multidimensional perspective on family involvement allows for a better understanding of the importance of activities such as helping children with their homework or reading books with children to promote learning. Through developing a multifaceted understanding of family involvement in education, research has begun to better understand how to improve educational outcomes for low-income and at-risk youth. Research that conceptualizes family involvement in more multifaceted ways has suggested many low-income families are highly involved in their child's education (Lee, & Bowen, 2006; McWayne Campos & Owsianik, 2008). Furthermore, family involvement in education appears to be particularly beneficial for improving educational outcomes for immigrant children and children with non-English speaking parents (Lahaie, 2008).

## **Involvement in Head Start**

Family involvement in the Head Start program is an integral piece of the two-generation approach to early childhood education. Since Head Start development in the 1960's and 1970's, the program has embodied a Bronfenbrenner approach to early childhood intervention (1974). Bronfenbrenner's ecological model suggests that impactful childhood interventions must work with parents and caregivers as well as children (Bronfenbrenner, 1974; Bronfenbrenner, 1994). Subsequent research has supported the idea that childhood programming is most impactful when it includes parents and caregivers (McLoyd, 1998).

Parental involvement in early childhood education has been shown to produce both short and long term benefits in children (Arnold et al, 2008; Barnard, 2004; Rumberger, 1995; Hill, & Craft, 2003; McWayne, Hahs-Vaughn, Cheung, & Wright, 2012; Parker, Boak, Griffin, Ripple, & Peay, 1999). Children with parents that were highly involved in their early childhood education programs similar to Head Start had lower rates of high school drop-out, higher preliteracy skills and increased overall school readiness (Arnold et al, 2008; Barnard, 2004; McWayne, et al, 2012; Rumberger, 1995). Beyond benefits to children, family involvement in Head Start also provides benefits to families. Roskos and Neuman (1993) found that parent involvement in early childhood education programs similar to Head Start produced improvement in parent attitudes, parent understanding of their child's behaviors and improvements in parent-child interactions.

While research on parental involvement in early education is abundant, research on parental involvement in Head Start specifically is limited. Research has shown

children enrolled in Head Start have improved levels of school readiness, and this impact is particularly noteworthy for immigrant students who showed significant improvement in language skills (Magnuson, Lahaie, & Waldfogel, 2006). In one of the few studies to examine the impacts of parent involvement in Head Start, Parker et al (1997) found parent involvement in Head Start had positive impacts on families and children. Families with parents that were highly involved in Head Start had improved family relationships through improved parent-child communication, enhanced home learning environments, children showed improved social competence, parents reported greater self-sufficiency and showed higher levels of involvement in K-12 education after their children graduated from Head Start. Evidence would suggest a number of positive benefits stemming from increased levels of parent and family involvement in Head Start services, however, such research is currently limited.

### **Satisfaction in Head Start**

Family satisfaction with education services has been recognized as a construct related to involvement (Fantuzzo, Perry, & Childs, 2006; McWayne et al, 2008). Currently, defining and measuring family satisfaction with education is in the early stages. Satisfaction is often defined as how satisfied families are with dimensions of their child's education such as their child's teacher or their child's classroom curriculum (Fantuzzo et al, 2006). Certainly, a complex topic such as satisfaction warrants further exploration.

Assessing family satisfaction in Head Start services provides an opportunity to engage families in a conversation around Head Start services. Through dialogue with Head Start families, policymakers and service providers have the opportunity to gain a



better understanding of why and how families would like to be involved (Fantuzzo, et al, 2006; McWayne et al, 2008) Assessing family satisfaction with Head Start services among immigrant families represents an opportunity to evaluate families' feelings toward interacting with the U.S. education at the earliest point in their child's education-a point that is, for many immigrant families, their first interaction with the US education system.

### **Immigrant Family Involvement in Head Start**

Engaging immigrant families in their child's education, either through open dialogue or other means, has been linked to improvements in children's educational attainment (Lahaie, 2008). Children of immigrants with limited English language proficiency in the US start their education behind in math and language compared to their English-speaking peers (Lahaie, 2008). Children of immigrant parents in the U.S. generally have more barriers to educational attainment than their US born peers. Half of all immigrant elementary school students are living below the federal poverty line (Capps et al., 2004). Many immigrant children are living in homes where English is not commonly spoken (Capps et al., 2004). Additionally, many immigrant parents come into the U.S. with lower educational attainment than is commonly seen in U.S. born families. Nearly a third of immigrant parents have less than the equivalent of a high school education compared to only one tenth of U.S. born parents (Capps et al., 2004). These three factors--low income, non-English speaking homes, low parental educational attainment--are major contributors to low educational attainment for children (Lee & Burkman, 2002).

Head Start plays a vital role in preparing immigrant students to enter kindergarten (Lahaie, 2008). The Head Start preschool program has been shown to increase academic

proficiencies in math and English among US born and immigrant children (Zigler, & Styfco, 2004; Lahaie, 2008). Head Start has been particularly successful in helping immigrant children from non-English speaking families to become more proficient in English before they enter kindergarten (Lahaie, 2008).

Family involvement in their child's education is a vital factor in improving outcomes for youth and increasing academic achievement (Arnold et al, 2008; Barnard, 2004; Miedel & Reynolds, 1999). Parent involvement as measured in much of the literature encompasses both home-based and school based involvement. Home-based involvement includes activities such as reading to a child or discussing a child's progress at school with the child. School-based activities include activities that are more related to school such as volunteering in the classroom or communicating with the teacher (Arnold et al, 2008; Barnard, 2004; Miedel et al, 1999). Low-income parents that are highly involved in their child's education in preschool and kindergarten have improved academic skills and decreased rates of dropout later in life (Arnold et al., 2008; Miedel et al, 1999). Similarly, parent involvement in their child's grade school education is positively correlated with children's subsequent graduation from high school (Barnard, 2004).

Despite the importance of Head Start in better preparing immigrant children to enter the US education system, immigrant children are significantly less likely to enroll in preschool programs of any kind (Lahaie, 2006; Matthews & Ewan, 2006). Of those children who do enroll in preschool, past research suggests that their families are less likely to be involved in their child's education in some of the more traditionally measured methods (Lamb-Parker et al., 1997; Moles, 1993). More recent research has suggested

that immigrant families may have limited involvement in their child's early education due to language or cultural barriers, working hours, and concerns over immigration status (Turney & Kao, 2009)

Research on the relationship between satisfaction and involvement in education among diverse families is in its infancy. One study has found a positive association between satisfaction with Head Start services and involvement in Head Start services among U.S. born families and Polish immigrant families (McWayne, Campos, & Owsianik, 2008). These findings point toward an important relationship between satisfaction with and involvement in Head Start services but are limited in sample and have not been replicated. Another study used a small dataset to explore demographic variables and satisfaction in services at they relate to involvement in Head Start services among diverse immigrant families, this study found satisfaction in services to be the strongest predictor of involvement in services-- above any demographic variables (Leong & Berzin, Unpublished). This study will explore the relationship between satisfaction and involvement in Head Start services among diverse immigrant and US born families using a representative sample from the 2009 Head Start Family and Child Experiences Survey (FACES) (U.S. Department of Health and Human Services, 2013).

## **Methodology**

### **Sample**

Data were derived from the 2009 Head Start Family and Child Experiences Survey (FACES) (U.S. Department of Health and Human Services, 2013). FACES data represent an ongoing evaluation of the Head Start program by the Office of Planning, Research and Evaluation in the Administration for Children and Families. Five FACES

data cohorts have been collected to date (1997, 2000, 2003, 2006, and 2009), and at the time of this publication, the 2009 cohort data were the most recently available dataset.

FACES data are a nationally representative sample of 3 and 4-year-old Head Start students, their families, their teachers, and their preschool centers. Children, families, and teachers have been sampled from every state in the United States and the District of Columbia. 2009 data are collected at four data collection points, the fall and spring of the students' first year of preschool, the end of the students' second year of preschool, and the end of the students' year of kindergarten. Every effort is made to interview each participant at each data collection point, providing a longitudinal dataset. Data are broken into three datasets, one of child data, one of center/program data, and one of classroom/teacher data (U.S. Department of Health and Human Services, 2013).

This study examined the first and second waves of data collection in the child dataset, representing data collected in the first year of the child's Head Start experience. As the study asks questions around satisfaction in services, subsequent waves of data were not included, as attrition due to dissatisfaction could represent a significant confounding variable in later data. A total of 3,349 parents of Head Start children were represented in the first year data. Throughout the analysis, every effort was made to include the entire sample in the analysis however; participants with missing data were omitted. Response rates for the two data collection time points used in this analysis were as follows: 94% of eligible children were assessed in fall of 2009, and 93% of eligible children were assessed in spring of 2010.

Children in this data ranged in age from 32 months to 60 months, with a mean age of 45.8 months. The majority of children were Hispanic/Latino (39.6%), followed by

African America (31.8%), White (20.6%), Multi-Racial/Biracial (5.4%), Asian/Pacific Islander (1.7%), Native American (0.6%) and other (0.2%). Nearly two-thirds of children lived in homes that fell below the poverty line (62.3%) and most were born in the U.S. (97.7%) Roughly half the children were male (50.2%) and a small percentage of children had an IEP in place when entering Head Start (5.5%). FACES data uses a complex sampling design that omits certain classrooms, to account for sampling bias, data were analyzed with the use of sampling weights.

### **Variables**

Demographic variable included in the analysis include parents' self-reported race (White, non-Hispanic; African American, non-Hispanic; Hispanic/Latino; American Indian/Native Alaskan; Asian/Pacific Islander; Multiracial; Other), age for each parent, level of education for each parent (Less than High School; High School/GED; Tech or Associates Degree; Bachelor's or Higher), employment status per parent (Employed Full Time; Employed Part Time; Looking for Work; Not in the Labor Force), place of birth (Born in the U.S.; Born Outside the U.S.) , language most often used in the families' house (English speaking; Not English Speaking), and a variable created to approximate the unique influence of acculturation and culture. Data are collected from both mothers and fathers and most variables are broken down by mother or father's responses; however, variables such as the language spoken in the home consists of a single response at the household level. The acculturation variable was created for this examination of the data by combining parent's place of birth and parent's language with a separate variable for mothers and for fathers. Albeit an imperfect approximation of the many facets of acculturation, previous research has suggested a relationship between language

acquisition and acculturation (Clément, 1986). The acculturation variable in this analysis allows us to isolate birthplace from language despite the high collinearity of the two variables for both mothers ( $t=41.19, p<0.001$ ) and fathers ( $t=40.93, p<0.001$ ).

All demographic variables were collected at the first data collection point in the fall of the first year of a child's enrollment in Head Start. Two variables had significant levels of missing data, both father's levels of education (missing 1,905 responses) and father's employment status (missing 1,949 responses) had at least a third of the data missing. To account for this missing data, both variables were analyzed as categorical variables and were coded to include missing values as a numerical value in the analysis- this allowed those individuals with missing data to be included in multivariate analysis however, they are missing values were not included in the analysis results.

Satisfaction and involvement in services at Head Start were collected during the second data collection point in the spring of the child's first year at Head Start. Satisfaction in services was measured through a subscale within the FACES survey assessing parent satisfaction in child services and parent satisfaction in family services separately. Satisfaction is measured on a 4-point Likert type scale ranging from very dissatisfied to very satisfied. Satisfaction in family services includes questions assessing information like parents' satisfaction in their Head Start program's level of support for community services or the expression of a family's culture. Satisfaction in child services assess information such as a parent's satisfaction with their Head Start's ability to help their child grow and develop, or provide a child with a safe space. As there is a great deal of collinearity between the two measures of satisfaction ( $t=20.00, p<0.001$ ), analysis on each was conducted separately.

Involvement in Head Start services was measured through a series of questions within the FACES survey that ask if parent's have participated in any number of activities at Head Start and if so, how often. Questions focus on Head Start specific areas of involvement such as attendance at parent-teacher meetings, participation in Head Start parent committees, or volunteering in Head Start classrooms and do not include involvement in at-home learning, or community learning activities.

### **Analysis**

Data were analyzed using STATA 14. Analysis sought to examine demographic variables and satisfaction in services as they relate to involvement in Head Start. Data were analyzed with the use of sampling weights to account for the complex sampling and eligibility criteria that impacted the generalizability of the dataset. For example, Head Start programs in U.S. territories, Early Head Start, and Head Start programs funded through streams directed toward Native Americans and Migrant Workers were ineligible to participate in FACES data collection creating a sample that does not fully represent those populations. Sampling weights also standardized variables to allow for more straightforward analysis.

Given the focus on immigrant families, analysis included variables associated with immigration in each regression analysis including language and parents' birthplace. Analysis between mothers and fathers was conducted separately to examine if any difference exist in predictors of involvement between mothers and fathers. Analysis began with simple bivariate regression analyses to examine which variables showed significant relationships with involvement in services at a significance level of either  $p < 0.05$  or  $p < 0.001$ . This was followed by two multivariate regression models examining

the associations between the variables that showed significant relationships with involvement. Multivariate regression models were divided into a model examining demographic variables and satisfaction in family services and a second model examining demographic variables and satisfaction in child services. Finally, analysis examined mediating relationships between employment, level of education, and involvement to examine the potential mediating effects of employment on the relationship between levels of education and levels of involvement in Head Start.

## **Results**

### **Bivariate**

Bivariate analysis examined each demographic and satisfaction variable independently in their relationship with involvement in services. Bivariate analysis dropped any participant that did not answer a relevant question; for example if a participant did not answer a question related to involvement that participant was not included in bivariate models related to involvement producing variations in sample sizes. Bivariate regression pointed toward the importance of satisfaction in services for children ( $t=4.50$ ,  $p<0.001$ ) and satisfaction in services for families ( $t=5.57$ ,  $p<0.001$ ), as satisfaction increased by one unit, involvement in services increased by 4.5 and 5.57 units respectively. Parents' levels of education also showed a significant relationship with involvement in services as parents attained higher levels of education. For mothers with higher levels of education, involvement in Head Start services increased. Mothers with an associates degree or some college were more involved than the baseline group, mothers without a high school degree ( $t=2.80$ ,  $p<0.001$ ) and mothers with a 4 year college degree were also more involved than the baseline group, mothers that had not completed high



school ( $t=4.41$ ,  $p<0.001$ ). Similarly, fathers with an associate's degree or some college were more involved than the baseline group, fathers without a high school degree ( $t=2.74$ ,  $p<0.001$ ) and fathers with a 4-year college degree were also more involved than fathers that had not completed high school ( $t=2.53$ ,  $p<0.05$ ). At the lowest levels of education for both mothers and fathers, education showed no significant relationship with levels of involvement in services. Parental employment status showed no significant relationship with parent involvement for either mothers or fathers.

Variables associated with birthplace of the parents, language used in the home, length of time in the United States for parents born outside the United States, and culture showed no significant relationship with involvement for either mothers or fathers. See table 1. (Table 1)

**Table 1.** Bivariate Coefficients with Involvement

Family					
			n		Involvement Coefficient
Satisfaction in Family Services			2271		5.57**
Satisfaction in Child Services			2565		4.50**
Language in Home			3227		-0.9
Mother			Father		
	n	Involvement Coefficient		n	Involvement Coefficient
Race	3224		Race	3165	
White, non-Hispanic		-	White, non-Hispanic		-
African American		-0.16	African American		-0.05
Hispanic		-0.28	Hispanic		-0.33
Native American		0.14	Native American		2.34
Asian/Pacific Islander		0.16	Asian/Pacific Islander		-0.28
Multiracial		-0.31	Multiracial		0.77
Other		1.43	Other		0.89
Age	3151	1.72	Age	2732	0.96
Education	2990		Education	1444	
Less than HS		-	Less than HS		-
HS or GED		1.49	HS or GED		1.14
Assoc or Some College		2.80**	Assoc or Some College		2.74**
4 Year Degree		4.41**	4 Year Degree		2.53*
Place of Birth	3110	0.24	Place of Birth	3045	0.79
Acculturation	3110		Acculturation	3045	
U.S. Born, English speaking		-	U.S. Born, English		-
U.S. Born, Non-English		0.54	U.S. Born, Non-English		-0.92
Not- U.S. Born, English		-1.09	Not- U.S. Born, English		-0.90
Not U.S. Born, Non-English		-0.43	Not U.S. Born, Non-English		-0.20
Employment Status	2900		Employment Status	1400	
Full Time		-	Full Time		-
Part Time		0.29	Part Time		0.59
Looking for Work		1.30	Looking for Work		0.54
Not in Labor Force		0.59	Not in Labor Force		-3.14
Length of time In U.S. (foreign born only)	1081		Length of time In U.S. (foreign born only)	1076	
Less than 5 years		-	Less than 5 years		-
6-10 years		0.00	6-10 years		0.00
More than 10 years		1.48	More than 10 years		0.76

\*\* p&lt;0.001

\*p&lt;0.05

### **Multivariate Model 1**

Multivariate analysis pulled out variables from the bivariate analysis that showed significant associations with involvement in Head Start services, as well as variables related to nativity. Model 1 represent a multivariate regression examining mother and father variables separately as they relate to involvement in services and satisfaction in family services. Both analyses show a similar picture, pointing toward the importance of satisfaction in services in examining levels of involvement in services, and a parents' level of education as they relate to levels of involvement in services. With parent's culture and race controlled for in the model, mother's level of education remained a significant factor in her involvement in Head Start services. Mothers with an associates degree or some college were 2.3 units more involved than the baseline group, mothers that had not completed high school ( $t=2.30$ ,  $p<0.05$ ) and mothers with 4 year college degree remained more involved than the baseline group, mothers that had not completed high school ( $t=4.44$ ,  $p<0.001$ ). Similarly, fathers with a 4-year college degree were 2.39 units more involved than the baseline group, fathers without a high school degree ( $t=2.39$ ,  $p<0.05$ ). Despite the importance of education, satisfaction in family services showed to be the strongest predictor of involvement in services for both mothers ( $t=5.80$ ,  $p<0.001$ ) and fathers ( $t=6.93$ ,  $p<0.001$ ), indicating for every one unit increase in satisfaction in services, involvement in services increased by 5.8 units and 6.93 units respectively.

As seen in Table 3, race produced some significant results among one small sample of fathers. Fathers that reported their race as Native American/Native Alaskan showed significantly higher rates of involvement than the baseline group, White non-

Hispanic fathers ( $t=3.20$ ,  $p<0.05$ ). However, these result can only be taken as exploratory given the sample size of Native American/Native Alaskan fathers is only 22 participants. (Table 2)

### **Multivariate Model 2**

As seen in table 2, model 2 examines similar relationships as model 1, but replaces satisfaction in family services with satisfaction in child services. Given the collinearity between satisfaction in family services and satisfaction in child services ( $t=20.00$ ,  $p<0.001$ ), it was expected to see similar associations in this model. Consistent with model 1, both mothers and fathers with higher levels of education show a relationship between level of education and involvement in services. Interestingly, for fathers the association between satisfaction in child services and involvement ( $t=4.67$ ,  $p<0.001$ ) is notably weaker than the relationship between satisfaction in family services and levels of involvement ( $t=6.39$ ,  $p<0.001$ ). Despite the weaker relationship, satisfaction in child services still proves to be the strongest predictor of involvement in the fathers' model.

Again, in model 2, we see a small racial group produced significant results that must be considered exploratory. Mothers that reported their race as "other" showed an increase in involvement by 2.44 units over the baseline group of White, no-Hispanic mothers ( $t=2.44$ ,  $p<0.05$ ). However, this group only contained 25 participants and cannot be considered conclusive evidence of a relationship. (Table 2)

**Table 2.** Multivariate Coefficients with Involvement in Head Start

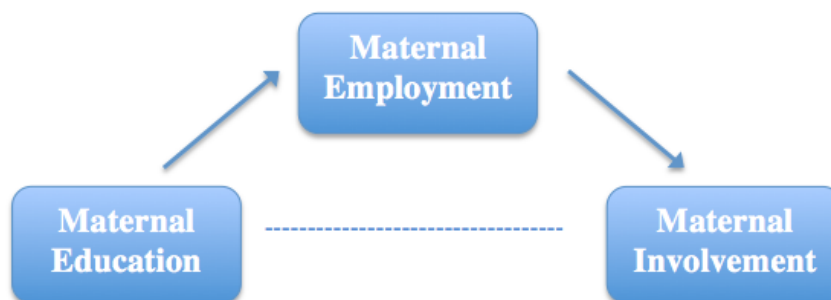
	<b>Model 1</b> <b>(Family Satisfaction)</b> n=2,258	<b>Model 2</b> <b>(Child Satisfaction)</b> n=2,510		<b>Model 1</b> <b>(Family Satisfaction)</b> n=2,364	<b>Model 2</b> <b>(Child Satisfaction)</b> n=2,637
<b>Mother</b>			<b>Father</b>		
<b>Satisfaction in Child Services</b>		5.43**	<b>Satisfaction in Child Services</b>		4.67**
<b>Satisfaction in Family Services</b>	5.80**		<b>Satisfaction in Family Services</b>	6.39**	
<b>Race</b>			<b>Race</b>		
White, non-Hispanic	-	-	White, non-Hispanic	-	
African American	0.40	-0.09	African American	0.80	0.42
Hispanic	1.26	1.29	Hispanic	1.00	0.81
Native American	0.16	-0.54	Native American	3.20*	3.05
Asian/Pacific Islander	1.45	0.92	Asian/Pacific Islander	0.72	0.10
Multiracial	0.10	-0.08	Multiracial	0.92	0.77
Other	2.36	2.44*	Other	1.03	1.37
<b>Education</b>			<b>Education</b>		
Less than HS	-	-	Less than HS	-	
HS or GED	1.16	1.40	HS or GED	0.96	0.75
Assoc or Some College	2.30*	3.00**	Assoc or Some College	1.96	2.50*
4 Year Degree	4.44**	4.60**	4 Year Degree	2.39*	2.19*
<b>Culture</b>			<b>Culture</b>		
U.S. Born, English	-	-	U.S. Born, English	-	-
U.S. Born, Non-English	0.17	0.49	U.S. Born, Non-English	-1.78	-1.33
Not- U.S. Born, English	-1.08	-0.72	Not- U.S. Born, English	-1.73	-1.47
Not U.S. Born, Non-English	-0.88	-0.33	Not U.S. Born, Non-English	-1.17	-0.73

\* $p < 0.05$ \*\* $p < 0.001$

## Mediating and Moderating Effects

Associations between education level and involvement inevitably bring up questions around employment and involvement in a child's education. The relationship between education level and involvement is an intricately interwoven relationship (Suizzo & Stapleton, 2007). For both mothers and fathers, the relationship between education, employment and involvement was further examined to establish if there is any mediating or moderating effects. A Karlson/Holm/Breen (KHB) analysis was conducted to evaluate any mediating effects and an interaction analysis was conducted to evaluate any moderating effects of employment on the relationship between education and involvement in services (Breen, Karslon & Holm, 2013). For fathers, there were no significant associations, meaning the relationship between a father's level of education and his involvement in his child's Head Start program is not mediated or moderated by a father's level of employment. For mothers, the relationship between a mother's level of education and her involvement in her child's Head Start program is fully mediated by her employment status ( $b=-4.01$ ,  $p<0.00$ ). Interaction analysis showed no interaction between mother's education and employment, indicating mother's educational attainment is related to mother's employment status and her employment status is related to her levels of involvement. (See figure 1).

**Figure 1:** Mediation Between Maternal Education, Employment, and Involvement



## **Discussion**

Through the use of the 2009 Head Start FACES data, this study sought to better understand variables associated with involvement in Head Start services. Early childhood education programs similar to Head Start have shown particular promise in preparing immigrant children to enter and succeed in the kindergarten through 12<sup>th</sup> grade education system in the United States (Arnold et al, 2008; Barnard, 2004; McWayne, et al, 2012; Rumberger, 1995). Parental involvement in education as early as preschool has also shown promise in helping children to succeed in their education (Arnold et al, 2008; Barnard, 2004; Hill, & Craft, 2003; McWayne, et al, 2012; Parker, et al, 1999; Rumberger, 1995). Given the potential to improve educational outcomes for youth, particularly immigrant youth, this study analyzed demographic variables that have historically been associated with parental involvement in a child's education as well as variables associated with immigration. Results presented here and in previous research indicate that immigrant families do not differ from their US born peers in their involvement with their child's Head Start program (Day Leong & Berzin, unpublished). Previous research has focused on the unique relationship many immigrant families have with their child's education provider (Ji, & Koblinsky, 2009; Lamb-Parker et al., 1996; Moles, 1993; Ramirez, 2003). Results here indicate immigrant families may share some similarity with U.S. born families in the way they relate to their child's education and the importance of satisfaction in services. Results indicate that for both immigrant and U.S. born parents, satisfaction in services is a consistently strong predictor of involvement in services.

Parents' levels of education show a complex relationship with employment and involvement in services. For mothers, a parent's level of education is fully mediated by employment in its relationship with involvement in services. For father, a parent's level of education is directly predicted involvement in services and shows no mediation or moderation by employment status. Previous research has shown parental educational attainment to be an important variable in a child's education in a number of ways, including parent involvement in their child's education (Davis-Kean, 2005; Lee & Bowen, 2006). Particular attention has been dedicated to the relationship between maternal educational attainment and child educational attainment, showing mothers with higher levels of education are likely to have children with higher levels of educational attainment (Suizzo & Stapleton, 2007). Evidence presented here suggests that relationship may encompass the influence of maternal employment as well. Regression analysis indicate involvement increases as maternal education increases, however, mediation analysis indicated this relationship goes through employment. This would suggest mothers with more education are more likely to be employed and with higher levels of employment, maternal involvement in education increases. Suizzo and Stapleton (2007) examined the influence of maternal education on child education attainment and found that not only did mothers with higher levels of education have children with higher levels of education, additionally; mother's with higher levels of education had higher expectations for their own children. This, taken along side evidence presented here, would suggest a that when a mother's education leads to employment, this may lead to higher expectations and involvement in their child's education. However, speculatively,



mothers with higher levels of education that are unable to find employment, may approach their child's education differently.

The relationship between education, employment and involvement in services certainly shows complex results. Although further, potential qualitative research, would be necessary to fully unpack this relationship, results suggest work hours may play a role. For mothers with a 4-year college degree, work hours may be a more traditional 40-hour workweek, leaving some time for parent involvement in education. For mothers reporting they have some college or an associates degree, mothers may be currently attending college in addition to working or working multiple jobs with varied hours, leaving less time for involvement in their child's education. Interestingly, analysis for fathers shows a very different picture of the relationship between education, employment, and involvement in services. Fathers with higher levels of education also show higher levels of involvement in their child's education. However, father's level of employment shows no mediation or moderation in the relationship between education and involvement. This may indicate gender norms around employment and child rearing play a significant role in parental involvement in their child's education and that relationship may be related to levels of education and maternal employment.

Regardless of education status or immigration status, satisfaction in services proved to show the strongest predictor of involvement in services. In the employment sector, satisfaction in work has shown a consistent associated with engagement and productivity at work (Hersey, 1932; Wefald, & Downey, 2009; Zelenski, Murphy, & Jenkins, 2008). Analysis shows the importance of satisfaction in services to involvement

in services. Efforts to improve involvement in Head Start services would benefit from a responsive examination of satisfaction in Head Start services.

### **Limitation and Future Direction**

Analysis indicates a number of statistically significant relationships between education, employment, satisfaction in services, and involvement in Head Start among both foreign-born parents and U.S. born. This analysis falls short of explaining such relationships in the absence of qualitative data. Large scale quantitative data such as this cannot fully explain how relationships between variables function, rather, they can only claim that associations exist. In an effort to increase levels of involvement in Head Start services, further exploration in the relationship between education, employment, satisfaction and involvement would benefit in the development of targeted intervention programming.

As is the nature of secondary research and survey based research, reporting bias by parents and Head Start teachers limits the conclusions that can be drawn from this study. As noted, certain data contained large numbers of missing variables that may have significance. In particular father's employment status and father's education level contained large numbers of missing data. In this dataset, fathers that did not report their level of education and/or their employment status were more likely to be racial minorities. This would suggest these fathers might differ in some significant way from the fathers that did provide this information. Further analysis should examine how and why these groups did not report this information.

Furthermore, data surrounding immigration is inherently limited by the potential number of undocumented families in Head Start that may be unwilling to offer certain

information. Head Start does not collect information on immigration status of any family enrolled in the program, thus such information cannot be accounted for in secondary self reported data.

Lastly, data analysis was conducted on only parent/legal guardian caregivers. Many immigrant families in the U.S. utilize non-nuclear family members to provide care for children (Foner, 1997; Leach, 2012). Excluding non-nuclear family members from this analysis limits the results to only a specific sector of the population. Considerations should be given in future research to examine if families relying on non-nuclear family structures present a unique perspective.

Future research should utilize more in-depth methodology to further explore the relationships presented here. Previous research has indicated a significant relationship between language, culture-based perceptions of education, birthplace, and a families' relationship with their child's school (see e.g. Garcia Coll, et al, 2002; Suárez-Orozco & Suárez-Orozco, 2001; Turney & Kao, 2009). The absence of statistical support for this theoretical relationship should be further explored with a more nuanced examination of how immigrant families engage and relate to their child's Head Start.

### **Implications**

This research presents the idea that satisfaction in Head Start services could predict engagement in services across diverse communities. This suggests two potential implications for policy makers and service providers: (1) responsively evaluating satisfaction in Head Start services could provide a practical, simple, and affordable tool to increase engagement in services among diverse communities and (2) improved quality

of services in Head Start could increase satisfaction in services and ultimately, increase engagement in services.

For the research community, results here suggest cultural differences in immigrant communities may not produce as many significant differences in how immigrant families interact with their child's Head Start services. Gutiérrez and Rogoff (2003) have suggested research examining cultural variations in immigrant and ethnic minority communities as they relate to their child's education must avoid overgeneralizations and over simplification. Gutiérrez and Rogoff (2003) also rightfully point out that cultural characteristics should be understood in context-- both historical context and the context in which they are studies. In this application, this would suggest that while an immigrant community may present cultural commonalities in some environments, those cultural attributes might be flexible when interacting with Head Start. This suggests a simplistic examination of immigrants in Head Start that seeks to prescribe traits to entire immigrant communities may miss important nuances. Examinations of satisfaction in services provided by Head Start may allow for a more contextualized understanding of how teachers, policymakers, and Head Start staff can improve services to immigrant Head Start families without relying on generalized traits prescribed to immigrant communities.

Engagement in Head Start services is a cornerstone of the two-generation approach to early childhood education presented at Head Start. For Head Start to succeed the program must engage families in services. Research presented here suggests that satisfaction in Head Start services is one of the strongest predictors of engagement in Head Start services. Any policy or program efforts made at Head Start aimed at

increasing engagement in services should include efforts aimed at improving satisfaction in Head Start services.

## References

- Arnold, D. H., Zeljo, A., Doctoroff, G. L., & Ortiz, C. (2008). Parent Involvement in Preschool: Predictors and the Relation of Involvement to Preliteracy Development. *School Psychology Review, 37*(1), 74–90.
- Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review, 26*(1), 39–62.
- Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child development, 45*(1), 1-5.
- Bronfenbrenner, U. (1994). Ecological models of human development. *Readings on the development of children, 2*(1), 37-43.
- Breen, R., Karlson, K. B., & Holm, A. (2013). Total, Direct, and Indirect Effects in Logit and Probit Models. *Sociological Methods & Research, 42*(2), 164–191.
- Capps, R., Fix, M., Murray, J., Ost, J., Herwanto, S., & Passel, J. (2004). *Promise or Peril : Immigrants , LEP Students and the No Child Left Behind Act*. Washington, DC. Retrieved from <http://fcd-us.org/sites/default/files/PromiseOrPeril.pdf>
- Clément, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. *Journal of Language and social Psychology, 5*(4), 271-290.
- Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: the indirect role of parental expectations and the home environment. *Journal of family psychology, 19*(2), 294.
- Fantuzzo, J., Tighe, E., & Childs, S. (2000). Family Involvement Questionnaire: A multivariate assessment of family participation in early childhood education. *Journal of Educational Psychology, 92*(2), 367.

- Fantuzzo, J., Perry, M. A., & Childs, S. (2006). Parent satisfaction with educational experiences scale: A multivariate examination of parent satisfaction with early childhood education programs. *Early Childhood Research Quarterly*, 21(2), 142–152.
- Foner, N. (1997). The immigrant family: Cultural legacies and cultural changes. *International migration review*, 961-974
- Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational researcher*, 32(5), 19-25.
- Hersey, R. (1932). *Workers' Emotions in Shop and Home*. Philadelphia, PA: University of Pennsylvania Press.
- Hill, N. E., & Craft, S. A. (2003). Parent-school involvement and school performance: Mediated pathways among socioeconomically comparable African American and Euro-American families. *Journal of Educational Psychology; Journal of Educational Psychology*, 95(1), 74.
- Ji, C. S., & Koblinsky, S. a. (2009). Parent Involvement in Children's Education: An Exploratory Study of Urban, Chinese Immigrant Families. *Urban Education*, 44(6), 687–709. Retrieved from <http://ue.sagepub.com/content/44/6/687.short>
- Lahaie, C. (2008). School Readiness of Children of Immigrants: Does Parental Involvement Play a Role? *Social Science Quarterly*, 89(3), 684–705.
- Lamb-Parker, F., Piotrkowski, C., Kessler-Sklar, S., Baker, A. J. L., Peay, L., & Clark, B. (1997). *Parent involvement in Head Start: Final report: Executive summary*. New York, NY.
- Leach, M. (2012) A burden of support? Household structure and economic resources among Mexican immigrant families. *Journal of Family Issues*, 35(1), 28-53

- Lee, J.S., & Bowen, N. K. (2006). Parent Involvement, Cultural Capital, and the Achievement Gap Among Elementary School Children. *American Educational Research Journal*, 43(2), 193–218.
- Lee, V. E., & Burkam, D. T. (2002). *Inequality at the starting gate: Social background differences in achievement as children begin school*. Economic Policy Institute, Washington, DC
- Magnuson, K., Lahaie, C., & Waldfogel, J. (2006). Preschool and school readiness of children of immigrants. *Social Science Quarterly*, 87(5), 1241-1262.
- Matthews, H., & Ewen, D. (2006). *Reaching All Children? Understanding Early Care and Education Participation Among Immigrant Families*.
- McWayne, C., Campos, R., & Owsianik, M. (2008). A multidimensional, multilevel examination of mother and father involvement among culturally diverse Head Start families. *Journal of School Psychology*, 46(5), 551–573.
- McWayne, C. M., Hahs-Vaughn, D., Cheung, K., & Wright, L. G. (2012). National profiles of school readiness skills for Head Start children: An investigation of stability and change. *Early Childhood Research Quarterly*, 27, 668–683.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *The American Psychologist*, 53(2), 185–204. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9491747>
- Miedel, W. T., & Reynolds, A. J. (1999). Parent involvement in early intervention for disadvantaged children: Does it matter? *Journal of School Psychology*, 37, 379–402.
- Moles, O. (1993). Collaboration Between Schools and Disadvantaged Parents: Obstacles and Openings. In N. Chaukin (Ed.), *Families and Schools in a Pluralistic Society*. Albany, NY: State University of New York Press.
- Parker, F., Piotrowski, C, Kessler-Sklar, S., Baker, A., Peay, L., & Clark, B. (1997). Final



- report: Parent involvement in Head Start. New York: National Council of Jewish Women
- Parker, F. L., Boak, A. Y., Griffin, K. W., Ripple, C., & Peay, L. (1999). Parent-child relationship, home learning environment, and school readiness. *School Psychology Review*, 28 (3) 413-425
- Ramirez, A. Y. F. (2003). Dismay and disappointment: Parental involvement of Latino immigrant parents. *The Urban Review*, 35(2), 93–110.
- Roskos, K., & Neuman, S. (1993). Enhancing Head Start parents' conceptions of literacy development and their confidence as literacy teachers: a study of parental involvement. *Early Child Development and Care*, 89(1), 57-73.
- Rumberger, R. W (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, 32, 583-625.
- Suizzo, M. A., & Stapleton, L. M. (2007). Home-based parental involvement in young Children's education: Examining the effects of maternal education across US ethnic groups. *Educational Psychology*, 27(4), 533-556.
- Turney, K., & Kao, G. (2009). Barriers to School Involvement: Are Immigrant Parents Disadvantaged? *The Journal of Educational Research*, 102(4), 257–271.
- U.S. Department of Health and Human Services (2013) *Head Start Family and Child Experiences Survey (FACES): 2009 Cohort*. Washington, DC. Author
- Wefald, A. J., & Downey, R. G. (2009). Construct dimensionality of engagement and its relation with satisfaction. *The Journal of Psychology*, 143(1), 91–111.
- Zelenski, J. M., Murphy, S., & Jenkins, D. (2008). The happy-productive worker thesis revisited. *Journal of Happiness Studies*, 9, 521–537.

## **Conclusion**

This collection of studies proposes that satisfaction in services is an under-examined area of research that offers potential to increase engagement in services in Head Start programming across diverse populations. With an increasing population of immigrants from around the world entering the U.S., staying ahead of policy and program challenges will require the creation of initiatives that maintain effectiveness across linguistic and cultural barriers. Capitalizing on commonalities across immigrant population represents one method of working with diverse groups. Findings presented here suggest that satisfaction in Head Start services is one such commonality across various populations and may be a tool to increase engagement in Head Start services regardless of linguistic or cultural barriers.

Family engagement in Head Start services is a cornerstone of the two generation model of early childhood education and family intervention services offered at Head Start. Research on family interventions suggest that the success of Head Start programming is contingent on levels of family involvement in services (Bronfenbrenner, 1974; Bronfenbrenner, 1994; McLoyd, 1998). In 2016, the federal government appropriated nearly \$9.2 billion dollars to the Head Start program, for this money to be effectively used, families must engage in Head Start services.

A significant challenge in engaging Head Start families is working with linguistically and culturally diverse communities. Nearly 86% of Head Start preschools serve families that speak more than one language (Sanchez Fuentes, 2011). Head Start does not collect immigration data on their families; presumably, the significant linguistic diversity in Head Start represents significant immigrant populations. With high levels of

language and cultural diversity in each Head Start school, tools aimed at engaging families in Head Start services must cut across language and cultural differences. To date, of the limited research on immigrant involvement in Head Start services, much attention has been aimed at highlighting the unique relationships between Head Start and each individual immigrant community (see e.g. Garcia Coll, et al, 2002; Turney, & Kao, 2009). This research presents an exploration into the hypothesis that satisfaction in Head Start services is a concept that can be used throughout diverse immigrant communities to increase engagement in Head Start. This hypothesis is taken from the industrial organizational psychiatry theory that happier workers are more engaged and productive workers (Hersey, 1932), thus proposing the happier Head Start families will be more engaged and productive in their services. Taken as a whole, these findings suggest any efforts to increase family engagement in Head Start must include efforts to increase satisfaction in Head Start.

### **Summary of findings**

## **Chapter 2: Measuring Satisfaction in Head Start Services in Immigrant and US Born Families**

The first study presented here took a preliminary look at measuring satisfaction in Head Start services across immigrant group. The measurement of the construct of satisfaction in services is a field of study that is in its infancy, however, these preliminary analysis propose that satisfaction is a construct that maintains reliability across diverse communities. Satisfaction in services as a whole is a field of study that has had minimal research and is particularly absent in social services research. Of the limited research that has been done on satisfaction in services, prior research has largely measured satisfaction in unstandardized ways such as anecdotal reports and with often, unreported methods

(McNaughton, 1994; Schwartz & Baer, 1991) Social service research, in particular Head Start research, has had a focus on engagement in services for decades (see e.g. Bovaird, 2007; Mitchell, & Selmes, 2007, Roggman, Boyce, Cook, & Cook, 2002) however; very little research exists examining any relationship between satisfaction and engagement in services.

Given the preliminary nature of research on satisfaction in services, examining the potential impacts of satisfaction in services begins with an examination of the measurement of satisfaction. The Parent Satisfaction in Educational Experiences Survey (PSEE) (Fantuzzo, Perry, & Childs, 2006) represents an early attempt at creating a standardized measurement of satisfaction in services specifically for Head Start families. This tool is composed of 12 items, grouped into 3 submeasures focused on (1) satisfaction in the classroom, (2) satisfaction in the teacher, (3) satisfaction in the overall school contact experience. The PSEE represents a very straight forward, easily implemented measure of satisfaction in services that provides targeted feedback to schools.

Despite the promise of the PSEE, in the development of the PSEE was completed with a limited and relatively homogenous sample of Black and Caucasian mothers (Fantuzzo, et al 2006). This limited sample failed to validate the use of the PSEE in two of the largest and fastest growing immigrant groups in the United States- Asians and Latinos (Colby and Ortman, 2014).

Evaluations of the cross cultural measurement properties of the PSEE show the measure does maintain satisfactory reliability across both US born and immigrant families but may struggle to measure the proposed 3 submeasures. Results suggest a

potential limitation in using the PSEE to measure the proposed 3 submeasures across a diverse population, and potential limitations on the use of the PSEE in US born males. Results show some variability in the item test-retest correlations between US born and immigrant caregivers. However, overall analysis show the overall PSEE maintains satisfactory Chronbach's Alpha scores in both US born and immigrant caregivers. Additionally, the proposed 3-factor solution, representing the 3 submeasures described in the PSEE, did not fit this more diverse population. Taken together, results suggest the PSEE is measuring satisfaction in Head Start services as a unidimensional construct among diverse populations.

The implications of this study suggest that satisfaction in services may be a construct that can be easily measured across diverse immigrant groups in multiple languages. This provides the first step in the creation of psychometrically sound measurement of satisfaction in services across immigrant groups. By providing evidence that this construct can be measured across diverse communities, this study supports the idea that satisfaction in Head Start services could be a cross-cultural tool for use in multicultural classrooms.

### **Chapter 3: Predictors of Involvement in Head Start Services Among Diverse Immigrant Families**

Chapter three utilized the same dataset examined in chapter two with additional data collected in a second wave of data collection, in an effort to establish if satisfaction in services is a predictor of involvement in services, or if any number of demographic variables displayed stronger predictors of involvement in services. Previous research examining predictors of involvement in services among immigrant communities has pointed toward a potentially complicated relationship between culture, language, and

involvement in services (see e.g. Arzubiaga, Nogueron, & Sullivan, 2009; Dyson, 2001; Golden, 2011; Turney, & Kao, 2009). With 86% of Head Start preschools serving non-English speaking families (Sanchez Fuentes, 2011), predictors of involvement in services among immigrant families in a salient and growing issue of importance.

This study began with a diverse population of 196 Head Start caregivers/parents, of which nearly half (49%) were born outside of the United States. Those families born outside the United States hailed from 17 different countries and represented a diverse sample of immigrant families. The study used the PSEE to measure satisfaction in Head Start and the Family Involvement Questionnaire (FIQ) (Fantuzzo, Tinghe & Childs, 2000) to measure engagement in Head Start services. The FIQ measures engagement in services through the use of three submeasures examining engagement in home-based learning, school-based learning, and home-school communication.

Examining engagement in Head Start among this diverse sample began with an evaluation of associations between the three submeasures of involvement and the three submeasures of satisfaction proposed in the FIQ and the PSEE. Regression analysis found strong associations between satisfaction and involvement among the entire sample of US born and immigrant parents/caregivers. Furthermore, analysis indicated submeasures of satisfaction and involvement proposed in the PSEE and FIQ are highly correlated, suggesting the FIQ and PSEE may only measure one overall construct each. Similar to results seen in the second chapter of this dissertation, results seen in chapter 3 suggest the attempts to establish 3 submeasures of focused constructs of satisfaction and involvement have not succeeded. Rather, results presented in this dissertation suggest that

PSEE and FIQ only measure one, unidimensional construct of satisfaction and involvement respectively.

Further analysis examined bivariate regressions examining relationships between demographic variables with satisfaction and involvement variables. Bivariate regression found no variables associated with immigration to be associated with involvement. Analysis found caregiver's relationship to the child to be predicted levels of involvement in services, indicating parents are more involved in their child's education than caregivers that are not parents such as grandparents or aunts/uncles. Analysis also found caregiver/parent levels of education were predicted levels of involvement, indicating the caregivers with a high school education were less involved than caregivers with a college degree, similarly caregivers that had not completed high school were less involved than caregivers with a college degree. Lastly, satisfaction in services showed to be the strongest predictor of involvement in services.

After establishing variables that predict involvement in services, a multivariate regression analysis examined how variables associated with involvement in the bivariate analysis related to involvement when examined together in a multivariate regression model. In a multivariate model, satisfaction in services once again showed to be the strongest predictor involvement in services.

The findings presented in this study contrast previous research focused on the different needs of linguistically and culturally diverse communities (Turney, & Kao, 2009; Garcia Coll, et al, 2002). Although this does not contradict the idea that diverse immigrant communities have different needs in their relationship with their child's Head Start programming, this study proposes there is a commonality that can be capitalized on

to increase engagement in services. Satisfaction in services appears to represent one construct that is universally important in a family's relationship with their child's Head Start program among a diverse sample of immigrant groups.

#### **Chapter 4: Immigrant Parent Involvement in Head Start Services: An examination of FACES data**

Chapter four examined a similar question to that which was examined in chapter three; however, in Chapter four this question was examined with the Head Start Family and Child Experiences Survey 2009 (FACES) (U.S. Department of Health and Human Services, 2013). By utilizing FACES data, this study was able to examine a much larger sample, isolate the relationship of the caregiver to the child by using only data collected from parents, and include an even more diverse sample of parents. FACES data represents a collection of data from the Administration for Children and Families, the federal office that funds and oversees Head Start. FACES data used for this study included the parents of 3,349 Head Start students. This analysis focused on a number of variables that have previously been indicated as relevant to family involvement in Head Start services and measures of satisfaction in services.

Analysis was divided between mothers and fathers and began with a bivariate regression analysis examining demographic variables, satisfaction, and involvement in services. In FACES data, satisfaction in services is divided between satisfaction in child directed services and satisfaction in family directed services. Analysis conclusions were similar to those found in chapter three, showing parents' levels of education and satisfaction in both types of services predicted levels of involvement. Satisfaction variables showed the strongest predictive value of involvement in services; satisfaction in



family directed services had a slightly stronger association with involvement in services than satisfaction in child directed services.

Multivariate analysis was then conducted, examining relationships between demographic variables that were previously shown to be related to involvement (parents' education), a variable including information related to immigration (parents' place of birth, parents' language), satisfaction, and involvement. Again, parents' levels of education and parents' level of satisfaction in Head Start services showed the strongest predictive value of levels of involvement in services.

FACES data also presented the opportunity to examine how the relationship between parents' levels of education related to parents' levels of involvement. Through an interaction analysis and a KHB analysis, the relationship between parents' levels of education, parents' employment status, and parents' levels of involvement were analyzed to look for any mediating or moderating effects. Analyses suggest that the relationship between level of education among fathers and levels of involvement among fathers is a direct association; meaning fathers' employment status does not impact that relationship. Interestingly, the relationship between mothers' levels of education and mothers' levels of involvement in Head Start is fully mediated by mothers' employment status. Results indicate the role of gender may provide some nuance to the relationship between parents' levels of education, parents' employment, and parents' levels of involvement in services.

This study provides more robust evidence that satisfaction in Head Start services is an important construct in the effort to increase engagement in Head Start services regardless of linguistic or cultural differences. The FACES data provides the opportunity to examine predictors of engagement in Head Start services among a much more diverse

sample of immigrant and US born families across all 50 states. With this representative group, satisfaction in services remained a primary predictor of engagement in services and held a stronger relationship with engagement in services than any demographic variables.

This study also sheds light on findings in Chapter 3 that suggest parental educational attainment in a significant predictor of parental engagement in Head Start. Although this relationship is certainly complex, it appears gender and employment plays a significant role in this relationship. This may suggest that employed mothers and employed fathers may have different needs in the efforts to increase parental engagement in Head Start services.

### **Implications for Policy and Practice**

Head Start was developed under the Johnson administration in an effort to decrease the achievement gap between minority students and White, US born students (Johnson, 1965). Head Start grew out of grassroots unrest that pushed for more opportunities in low-income communities. Originally conceptualized as a community action program that would be federally funded but community controlled, Head Start was initially thought of as a summer program for low-income children. Over time, the Johnson Administration pushed for more control over the program, and Head Start as it is today began to take shape (Zigler & Styfco, 2004).

Despite increasing the size and scope of Head Start, achievement gap has persisted through the decades. Gains have been made in lessening the racial gap, however an increase in the achievement gap has developed between socioeconomic groups (Reardon, 2011). Interests in closing the achievement gap have led to an increased

understanding around the number of avenues to increase academic achievement of under privileged, low income, minority students. Research has indicated increased levels of parent/caregiver involvement in early childhood education can improve behavioral and academic outcomes in disadvantaged students and may help close the achievement gap (Arnold et al, 2008; Barnard, 2004; McWayne, Hahs-Vaughn, Cheung, & Wright, 2012; Parker, Boak, Griffin, Ripple, & Peay, 1999; Rumberger, 1995). These gains appear to be particularly significant for immigrant and English language learner students (Lahaie, 2008).

Immigrant and English language learner students have been shown to start their education academically behind their US born counterparts, particularly in language skills among Central American and Caribbean children (De Feyter & Winsler, 2009; Koury & Votruba-Drzal, 2014). Recent attention has been given to the phenomena of immigrant students that begin their education academically behind their peers, but attain higher levels of education than their similarly situated peers. This phenomenon has been called the “immigrant paradox” and it describes how some first generation children of immigrants achieve better health, behavioral and academic outcomes than their similarly situated peers. Over the length of stay in the US, immigrant families see levels of health and achievement decrease and generally, by the third generation of an immigrant family in the US, children are on par with overall trends in the United States. As this phenomenon has been studied over time, the research community has come to understand it to be much more nuanced than previously asserted. It appears socioeconomic status, gender, and the country from which a family originate play a significant role in the immigrant paradox. In general, Latin American immigrants, girls, and low-income

immigrants do not see the same benefits from the immigrant paradox as are seen in higher income, East Asian, male students (Garcia Coll & Marks, 2012). Furthermore, the immigrant paradox does not appear to have brought low income immigrants out of the achievement gap. Low-income immigrant children and some racial minority immigrant children still do not perform on par with higher income or racial majority peers despite any gains from the immigrant paradox (Crosnoe & Turley, 2011).

Evidence has pointed toward involvement in education, even early education, creates significant gains in closing the achievement gap. However, research on improving levels of involvement in Head Start among any population has been limited. Research on involvement in Head Start among immigrant groups is even more sparse. Research around immigrant communities and their child's early education often focuses on the divergent needs of immigrant communities. Studies have suggested that Latino immigrant communities view education in more holistic terms and engage in educational activities outside of the classroom (Lopez, 2001). Other research has suggested Korean families struggle with the U.S. model of education that places equal emphasis on parent and teacher feedback, and feel more comfortable with a model that places teachers in a position of authority (Turney, & Kao, 2009). While such findings are helpful for educators and Head Start staff working with one family at a time, policy makers and Head Start programs serving multi-cultural communities struggle to incorporate lessons from each unique immigrant community into one program. Furthermore, assigning unchanging generalized attributes to immigrant communities may hinder individualized and contextualized understandings of working with immigrant families (Gutiérrez, & Rogoff, 2003)

The three studies presented here suggest that satisfaction in services could be a commonality among diverse communities across the U.S. to increase engagement in Head Start services. Furthermore, examinations of satisfaction in services among Head Start families allows for more contextualized examinations of how families interact with their child's Head Start and push back against simplified views of how immigrant communities interact with education systems. Research on the value of satisfaction in services among the Head Start community is extremely limited. In the one existing research study evaluating satisfaction in services among Polish immigrant families, evidence suggests that satisfaction in services is related to engagement in services (McWayne, Campos & Owsianik, 2008). This promising evidence points toward the need for further understanding of the value of satisfaction in Head Start services. The three studies here represent an early exploration into this potentially valuable construct.

Given the limited research available specifically examining satisfaction in Head Start services, turning to theories proposed outside of early childhood research shed some light on the value of satisfaction in services. *The Happy Productive Worker Theory* (Hersey, 1932) proposes the importance of satisfaction in services to improve engagement in services. *The Happy Productive Worker Theory* is based in the research examining how to create a more engaged workforce. This research suggest that employees that are happy in their work will be more engaged in their work, thus more productive (Hersey, 1932). This theoretical approach to improving engagement in the workforce, when applied to Head Start services, would suggest that responsively evaluating satisfaction in Head Start services should improve levels of involvement in Head Start services.

Taken together, the three research studies presented here suggest that *The Happy Productive Worker Theory* does, indeed, hold true for parents/caregivers at Head Start and may cut across cultures and languages to serve as a tool to engage any family in Head Start regardless of demographic variables. This would suggest a simple, concise tool that could be easily implemented in Head Start preschools to improve levels of engagement in Head Start services. Given the value of engagement in early childhood education at closing the achievement gap, this simple intervention may prove to be a valuable step toward a more equal education system.

Previous research examining immigrant families as they relate to their child's Head Start services have capitalized on the unique needs of each immigrant group (Garcia Coll, et al, 2002; Turney, & Kao, 2009). The three research studies presented here propose a different model of working with immigrant communities; one based in the realities faced in Head Start classrooms. In most Head Start classrooms, educators work with a blended diverse group of immigrant and U.S. born families. Research focused on the differences between immigrant groups fails to provide guidance to educators that are working with multiple immigrant communities at once. The three studies presented here take steps toward examining how educators and Head Start staff can capitalize on the commonalities among diverse immigrant communities.

### **Limitations and Future Directions**

Relationships established in these studies are purely quantitative and cannot go as far or in depth as qualitative research would provide. Qualitative research, particularly qualitative research examining how the relationships presented here function among

diverse immigrant groups, would provide valuable information prior to establishing any intervention programs.

Potential intervention testing should be conducted on small, diverse groups to establish the value of responsively evaluating satisfaction in services in Head Start programing. Although strong evidence presented here suggests satisfaction in Head Start services predicts involvement in Head Start services across communities, establishing the value of responsively evaluating satisfaction in services can only happen with intervention testing.

Evidence presented here is also limited by the datasets used in this analysis. Limitations of the datasets include smaller samples of immigrant communities in chapters two and three, and the absence of non-parental caregivers in chapter four. As such, analysis cannot indicate the value of satisfaction in services among specific immigrant groups, rather it can only be taken as an analysis among diverse immigrant groups. Furthermore, given the prevalence of non-traditional family structures among immigrant communities, analysis presented in chapter four omits a particularly important sector of the population.

U.S. immigration is increasingly diverse and current understandings around immigrant communities in Head Start remains largely based on work done with Central and South American immigrants (see e.g. , McWayne, Melzi, Schick, Kennedy, & Mundt, 2013; Mendez, Westerberg, & Thibeault, 2013; Greenfader & Miller, 2014). Asian immigrants into the United States are currently the fastest growing immigrant group (Colby and Ortman, 2014). Furthermore, the United States takes in an average of nearly 100,000 refugees per year. The top three sending countries for American refugees

in 2016 were the DR Congo, Syria, and Myanmar (Igielnik & Krogstad, 2017). Yet research around immigrant families in Head Start remains largely focused on non-refugee, Latin American immigrants. As evidence from the immigrant paradox has shown, the country of origin for immigrant families is an important factor in their child's education (Crosnoe & Turley, 2011; Garcia Coll & Marks, 2012).

Future research directed toward understanding the value of evaluating satisfaction in Head Start must incorporate diverse immigrant groups, with particular attention directed toward Asian immigrant communities and immigrants with trauma histories such as refugees.

Future research may also seek to examine the role of gender in satisfaction and engagement in Head Start services. Head Start parents and caregivers are overwhelmingly female (Aikens et al, 2011), however, male parents and caregivers are a note worthy population in Head Start. The immigrant paradox implies that the gender of the child may be a unique variable in the education of immigrant children and the children of immigrants. Evidence presented in Chapter 4 of this dissertation also suggests that the gender of the parent may interact with employment when examining levels of involvement in Head Start services.

The three studies presented here have begun to explore the relationship between immigrant families and Head Start. Although this research is limited in comprehensive evaluation of such a complex relationship, it has addressed many gaps in the literature. Large gaps have previously existed in the knowledge base around predictors of immigrant family engagement in the Head Start program, what can be done to improve immigrant family engagement in Head Start, and what practical policy and program



solutions can be presented to educators working with blended classrooms of diverse immigrant and US born children. Taken as a whole, the three studies presented here provide a foundation for a line of research aimed at capitalizing on the commonalities between US born and diverse immigrant communities in an effort to improve levels of engagement in Head Start services. These three studies are a beginning in an effort to fill these largely overlooked gaps in the knowledge and serve as a catalyst for future research in this area.

### References

- Aikens, N., Hulsey, L. K., Moiduddin, E., Kopack, A., Takyi-Laryea, A., Tarullo, L., & West, J. (2011). Data Tables for FACES 2009 Head Start Children, Families, and Programs: Present and Past Data from FACES Report. OPRE Report 2011-33b. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Bovaird, T. (2007). Beyond engagement and participation: User and community coproduction of public services. *Public administration review*, 67(5), 846-860.
- Arnold, D. H., Zeljo, A., Doctoroff, G. L., & Ortiz, C. (2008). Parent Involvement in Preschool: Predictors and the Relation of Involvement to Preliteracy Development. *School Psychology Review*, 37(1), 74–90.
- Arzubiaga, A. E., Nogueron, S. C., & Sullivan, a. L. (2009). The Education of Children in Im/migrant Families. *Review of Research in Education*, 33(1), 246–271.
- Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and Youth Services Review*, 26(1), 39–62.
- Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of

- childhood. *Child development*, 45(1), 1-5.
- Bronfenbrenner, U. (1994). Ecological models of human development. *Readings on the development of children*, 2(1), 37-43.
- Colby, S. L. and Ortman, J. M., (2014) Projections of the Size and Composition of the U.S. Population: 2014 to 2060, *Current Population Reports*, U.S. Census Bureau, Washington, DC, P25-1143
- Crosnoe, R., & Turley, R. N. L. (2011). K-12 educational outcomes of immigrant youth. *The Future of Children*, 21(1), 129-152.
- De Feyter, J. J., & Winsler, A. (2009). The early developmental competencies and school readiness of low-income, immigrant children: Influences of generation, race/ethnicity, and national origins. *Early Childhood Research Quarterly*, 24(4), 411-431.
- Dyson, L. (2001). Home-School Communication and Expectations of Recent Chinese Immigrants. *Canadian Journal of Education*, 26(4), 455–476
- Fantuzzo, J., Tighe, E., & Childs, S. (2000). Family Involvement Questionnaire: A multivariate assessment of family participation in early childhood education. *Journal of Educational Psychology*, 92(2), 367.
- Fantuzzo, J., Perry, M. A., & Childs, S. (2006). Parent satisfaction with educational experiences scale: A multivariate examination of parent satisfaction with early childhood education programs. *Early Childhood Research Quarterly*, 21(2), 142–152.
- Garcia Coll, C., Akiba, D., Palacios, N., Bailey, B., Silver, R., DiMartino, L., & Chin, C. (2002). Parental Involvement in Children’s Education: Lessons from Three Immigrant Groups. *Parenting: Science and Practice*, 2(3), 303–324.

- Garcia Coll, C. & Marks, A. K. E. (2012). *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?* American Psychological Association.
- Greenfader, C. M., & Miller, E. B. (2014). The role of access to Head Start and quality ratings for Spanish-Speaking Dual Language Learners'(DLLs) participation in early childhood education. *Early childhood research quarterly*, 29(3), 378-388.
- Golden, O. (2011). DIALOG Raising Citizens : Head Start and the Changing Demographics of Today's Young Children, 14(1), 2–5.
- Hersey, R. (1932). *Workers' Emotions in Shop and Home*. Philadelphia, PA: University of Pennsylvania Press.
- Igielnik, R., & Krogstad, J. M. (2017). Where refugees to the U.S. come from. Retrieved from <http://www.pewresearch.org/fact-tank/2017/02/03/where-refugees-to-the-u-s-come-from/>
- Johnson, L.B. (1965, August 31) Remarks on Announcing Plans To Extend Project Head Start. Gerhard Peters and John T. Woolley, *The American Presidency Project*. Retrieved From <http://www.presidency.ucsb.edu/ws/?pid=27204>.
- Koury, A. S., & Votruba-Drzal, E. (2014). School readiness of children from immigrant families: Contributions of region of origin, home, and childcare. *Journal of Educational Psychology*, 106(1), 268.
- Lopez, G. R. (2001). The value of hard work : Lessons on parent involvement from an (im)migrant household. *Harvard Educational Review*, 71(3), 416–437.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *The American Psychologist*, 53(2), 185–204. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9491747>
- McNaughton, D. (1994). Measuring parent satisfaction with early childhood intervention

- programs: Current practice, problems, and future perspectives. *Topics in Early Childhood Special Education*, 14(1), 26-48.
- McWayne, C., Campos, R., & Owsianik, M. (2008). A multidimensional, multilevel examination of mother and father involvement among culturally diverse Head Start families. *Journal of School Psychology*, 46(5), 551–573.
- McWayne, C. M., Hahs-Vaughn, D., Cheung, K., & Wright, L. G. (2012). National profiles of school readiness skills for Head Start children: An investigation of stability and change. *Early Childhood Research Quarterly*, 27, 668–683.
- McWayne, C. M., Melzi, G., Schick, A. R., Kennedy, J. L., & Mundt, K. (2013). Defining family engagement among Latino Head Start parents: A mixed-methods measurement development study. *Early Childhood Research Quarterly*, 28(3), 593–607
- Mendez, J., Westerberg, D., & Thibeault, A. (2013). Examining the role of self efficacy and communication as related to dimensions of Latino parent involvement in Head Start. *NHSA Dialog*, 16(1).
- Mitchell, A. J., & Selmes, T. (2007). Why don't patients attend their appointments? Maintaining engagement with psychiatric services. *Advances in psychiatric treatment*, 13(6), 423-434.
- Parker, F., Piotrowski, C, Kessler-Sklar, S., Baker, A., Peay, L., & Clark, B. (1997). Final report: Parent involvement in Head Start. New York: National Council of Jewish Women
- Reardon, S. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. In G. J. Duncan & R. J. Murnane (Eds.), *Withering Opportunity? Rising Inequality, Schools, and Children's Life Chances*. New York, NY: Russel Sage Foundation.

- Roggman, L. A., Boyce, L. K., Cook, G. A., & Cook, J. (2002). Getting dads involved: Predictors of father involvement in Early Head Start and with their children. *Infant Mental Health Journal*, 23(1-2), 62-78.
- Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational researcher*, 32(5), 19-25.
- Rumberger, R. W (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, 32, 583-625.
- Sanchez Fuentes, Y. (2011). Head Start Today: A look at Demographics and Culture and Linguistic Responsiveness. In *Advisory Committee on Head Start Research and Evaluation*.
- Schwartz, I. S. & Baer, D. M. (1991). Social validity assessments: Is current practice state of the art? *Journal of Applied Behavior Analysis*, 2(2), 189–204.
- Turney, K., & Kao, G. (2009). Barriers to School Involvement: Are Immigrant Parents Disadvantaged? *The Journal of Educational Research*, 102(4), 257–271.
- U.S. Department of Health and Human Services (2013) *Head Start Family and Child Experiences Survey (FACES): 2009 Cohort*. Washington, DC. Author

## Appendix A

### Demographic Questionnaire for Chapter II and Chapter III

#### FAMILY INFORMATION

**How many children live in your household now (ages 0-17)?**

\_\_\_\_\_

**Are you currently the caregiver for anyone over the age of 18 such as an elderly family member or friend?**

\_\_\_\_\_

**How many children live in your household whom are currently enrolled in Head Start?**

\_\_\_\_\_

**If you have more than one Head Start child, what are their ages?**

\_\_\_\_\_ **How many boys?** \_\_\_\_\_ **How many girls?** \_\_\_\_\_

**Head Start Child's date of birth:**

\_\_\_\_/\_\_\_\_/\_\_\_\_  
(Month\Day\Year)

\_\_\_\_/\_\_\_\_/\_\_\_\_  
(Month\Day\Year)

**Head Start Child's Sex:**

- ☐ Male    ☐ Female  
☐ Male    ☐ Female

**Your relationship to the Head Start child (check all that apply):**

- ☐ Parent  
☐ Step-Parent  
☐ Grandparent  
☐ Aunt/Uncle  
☐ Foster parent  
☐ Godparent  
☐ Other \_\_\_\_\_

**Does your child live with you in the same household?**   ☐ Yes    ☐ No

**Your age:** \_\_\_\_\_

**Your gender:**    ☐ Male   ☐ Female   ☐ Other

**Total number of adults in your household (including you):** \_\_\_\_\_

**Formal Education (Please check the highest level you have completed):**

- ☐ No formal schooling
- ☐ Some elementary school (K-5)
- ☐ Completed elementary school (K-5)
- ☐ Some middle school (6-8)
- ☐ Completed middle school (6-8)
- ☐ Some high school (9-12)
- ☐ High school diploma (9-12) or GED
- ☐ Some college, vocational training, or 2-year college degree
- ☐ Bachelor's degree (4 years or more)
- ☐ Post-college graduate or professional school

**Marital status:**

- ☐ Single, not in a committed relationship
- ☐ Single, in a committed relationship (not living together)
- ☐ Living Together, not Married
- ☐ Married
- ☐ Widowed
- ☐ Separated/divorced

**Does anyone else help you take care of your child (e.g., wife/husband, girlfriend/boyfriend, sister/brother, mother/father, etc.)?** ☐ Yes ☐ No

If yes, whom?

---

**On average, how many days per week does this person care for your child?**

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days ☐ 6 Days ☐ 7 Days

**How involved would you say this person is in caring for your child?**

Very involved    Pretty involved    Not very involved    Minimally involved

**Employment (check all that apply):**

- ☐ Full-time
- ☐ Part-time
- ☐ Student/Job Training
- ☐ Not employed outside the home
- ☐ Currently seeking employment

**Ethnicity:**

- ☐ African American
- ☐ Caribbean
- ☐ Latin American
- ☐ African
- ☐ Asian
- ☐ South Asian

- ☐ Southeast Asian
- ☐ European
- ☐ Other (specify) \_\_\_\_\_

**Were you born in the United States?** ☐ Yes ☐ No

**If no, where were you born?**

---

**How many years have you lived in the United States?**

---

**What is your first language?**

---

**What language or languages does your child speak?**

---

**What is the primary language used in your home (please list all that apply)?**

---

**Your Race (please circle all that apply):**

- ☐ Black, non Hispanic
- ☐ Black, Hispanic
- ☐ White, non-Hispanic
- ☐ White, Hispanic
- ☐ Asian
- ☐ Biracial
- ☐ Other (specify) \_\_\_\_\_